

FEDERAL REGISTER

THE NATIONAL ARCHIVES
LITTERA SCRIPTA MANET
OF THE UNITED STATES
1934

VOLUME 4 NUMBER 145

Washington, Saturday, July 29, 1939

Rules, Regulations, Orders

TITLE 7—AGRICULTURE

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

[B.E.P.Q. 485, Third Revision]

WHITE-FRINGED BEETLE QUARANTINE RESTRICTIONS MODIFIED

SEC. 301.72A—ADMINISTRATIVE INSTRUCTIONS—REMOVAL OF WHITE-FRINGED BEETLE CERTIFICATION REQUIREMENTS UNTIL FEBRUARY 1, 1940, FOR SPECIFIED ARTICLES CONSIGNED FROM DESIGNATED PORTIONS OF THE REGULATED AREAS

Approved July 28, 1939; Effective July 28, 1939

Circular B.E.P.Q. 485, as revised July 7, 1939,¹ waived certification requirements until February 1, 1940, for specified articles consigned from certain parts of the areas regulated under quarantine No. 72. The only change in the present revision is to exempt from certification until February 1, 1940, certain articles consigned from Saint Bernard Parish, Louisiana.

Under authorization provided in Notice of Quarantine No. 72 (Sec. 301.72), all certification requirements are hereby waived until February 1, 1940, for the following articles enumerated in Regulation 3 (a) and (b), (Sec. 301.72-3) when free from soil, it having been determined that sanitary measures and natural conditions have so reduced the risk of contamination with the egg or adult stage of the white-fringed beetle as to render certification unnecessary during the period stated:

1. When consigned from the regulated parts of the following counties: In *Alabama*—Mobile County; in *Florida*—Escambia County; in *Louisiana*—East Baton Rouge Parish; in *Mississippi*—Jackson County, certification requirements are waived for the following articles:

Potatoes and sweetpotatoes.

¹ 4 F.R. 2855 DI.

Sweetpotato vines, draws, and cuttings.

Cordwood, pulpwood, stumpwood, and logs.

Used or unused lumber, timbers, posts, poles, cross-ties, and other building materials.

Hay, roughage of all kinds, straw, leaves, and leafmold.

Peas, beans, and peanuts in shells, or the shells of any of these products.

Seed cotton, cottonseed, baled cotton lint, and linters.

Used implements and machinery, scrap metal, junk, and utensils or containers coming in contact with the ground.

Brick, tiling, stone, and concrete slabs and blocks.

Nursery stock and other plants, which are free from soil.

2. When consigned from the regulated parts of the counties of Hinds and Pearl River in *Mississippi*, certification requirements are waived for the following articles:

Potatoes and sweetpotatoes.

Sweetpotato vines, draws, and cuttings.

Cordwood, pulpwood, stumpwood, and logs.

Used or unused lumber, timbers, posts, poles, cross-ties, and other building materials.

Hay, roughage of all kinds, straw, leaves, and leafmold.

Peas, beans, and peanuts in shells, or the shells of any of these products.

Used implements and machinery, scrap metal, junk, and utensils or containers coming in contact with the ground.

Brick, tiling, stone, and concrete slabs and blocks.

Nursery stock and other plants, which are free from soil.

3. When consigned from the parishes of Saint Bernard and Orleans (including the City of New Orleans) and from the regulated parts of the parishes of Jefferson and Plaquemines in *Louisiana*, certification requirements are waived for the following articles:

Potatoes and sweetpotatoes.

CONTENTS

RULES, REGULATIONS, ORDERS

TITLE 7—AGRICULTURE:	
Bureau of Entomology and Plant Quarantine:	Page
White-fringed beetle quarantine restrictions modified	3451
TITLE 10—ARMY: WAR DEPARTMENT:	
Eligibility for enlistment and reenlistment in the Regular Army	3452
TITLE 14—CIVIL AVIATION:	
Civil Aeronautics Authority:	
Position lights, regulations amended	3452
TITLE 21—FOOD AND DRUGS:	
Food and Drug Administration:	
Definition and standard of identity for:	
Tomato catsup	3454
Tomato juice	3453
TITLE 24—HOUSING CREDIT:	
Federal Housing Administration:	
Property improvement loans, regulations amended	3455
TITLE 45—PUBLIC WELFARE:	
Civilian Conservation Corps:	
Enrollment, etc., regulations amended	3455
TITLE 47—TELECOMMUNICATION:	
Federal Communications Commission:	
Ship radiotelegraph safety rules amended	3475
Ship service, rules governing	3456
Prior rules repealed	3474
Ship stations, standards of good engineering practice for	3474

NOTICES

Department of Labor:	
Wage and Hour Division:	
Apparel industry, employment of learners, hearing date changed	3475
Federal Power Commission:	
New England Power Co., hearing	3476
Tenney, Charles H., et al., hearing postponed	3477

(Continued on next page)



Published by the Division of the Federal Register, The National Archives, pursuant to the authority contained in the Federal Register Act, approved July 26, 1935 (49 Stat. L. 500), under regulations prescribed by the Administrative Committee, with the approval of the President.

The Administrative Committee consists of the Archivist or Acting Archivist, an officer of the Department of Justice designated by the Attorney General, and the Public Printer or Acting Public Printer.

The daily issue of the FEDERAL REGISTER will be furnished by mail to subscribers, free of postage, for \$1 per month or \$10 per year; single copies 10 cents each; payable in advance. Remit by money order payable to Superintendent of Documents, Government Printing Office, Washington, D. C.

Correspondence concerning the publication of the FEDERAL REGISTER should be addressed to the Director, Division of the Federal Register, The National Archives, Washington, D. C.

CONTENTS—Continued

Securities and Exchange Commission:

Notice of and orders for hearings:	Page
Central Power and Light Co.	3478
Copper District Power Co., Middle West Corp.	3478
Utilities Power & Light Corp., and Charles True Adams, order relative to applications and declarations.	3477

Sweetpotato vines, draws, and cuttings.

Cordwood, pulpwood, stumpwood, and logs.

Unused lumber, timber, posts, poles, and crossies.

Hay, roughage of all kinds, straw, leaves, and leafmold.

Peas, beans, and peanuts in the shells, or the shells of any of these products.

Seed cotton, cottonseed, baled cotton lint, and linters.

All articles, designated in paragraphs (a) and (b) of Regulation 3 of Quarantine No. 72¹ (Sec. 301.72-3) for which certification requirements are not hereinabove waived, shall remain under the restrictions of the quarantine during the period covered by this document.

(Issued under Sec. 301.72) [B.E.P.Q. 485, Third Revision, July 28, 1939]

[SEAL] AVERY S. HOYT,
Acting Chief.

[F. R. Doc. 39-2797; Filed, July 28, 1939; 12:14 p. m.]

¹ 3 F.R. 3005 DL.

TITLE 10—ARMY: WAR DEPARTMENT

CHAPTER VII—PERSONNEL

PART 71—ENLISTMENT IN THE REGULAR ARMY¹

§ 71.1 Eligibility for enlistment and reenlistment in the Regular Army.

(b) Orientals, Filipinos, and Puerto Ricans will not be enlisted within the continental limits of the United States for assignment outside thereof. If they meet the requirements for enlistment prescribed in paragraph (a) above, they may be enlisted within the continental limits of the United States for assignment to organizations with the approval of the corps area commander. Transfers of the classes listed above to stations outside the continental limits of the United States are not authorized.

(41 Stat. 765; 10 U.S.C. 42) [Par. 9, A.R. 600-750, April 10, 1939, as amended by Sec. II, Cir. 53, W.D., July 25, 1939]

[SEAL]

E. S. ADAMS,
Major General,
The Adjutant General.

[F. R. Doc. 39-2789; Filed, July 28, 1939; 9:28 a. m.]

TITLE 14—CIVIL AVIATION

CIVIL AERONAUTICS AUTHORITY

[Amendment 20, Civil Air Regulations]

POSITION LIGHTS

At a session of the Civil Aeronautics Authority held at its office in Washington, D. C., on the 25th day of July 1939.

Acting pursuant to the authority vested in it by the Civil Aeronautics Act of 1938, particularly sections 205 (a) and 601 (a) of said Act, and finding that its action is desirable in the public interest and is necessary to carry out the provisions of, and to exercise and perform its powers and duties under said Act, the Civil Aeronautics Authority hereby amends the Civil Air Regulations as follows:

Effective August 15, 1939, Part 15 of the Civil Air Regulations is amended as follows:

1. By striking the word "equipment" in the title of section 15.2 and inserting in lieu thereof the word "appliances."

2. By striking section 15.20 and inserting in lieu thereof the following new section:

"§ 15.20 Position lights.

"§ 15.200 General provisions. Position lights prescribed in Part 04 of the Civil Air Regulations, in order to be certificated, shall be so constructed and capable of being so mounted as to comply with the regulations hereinafter prescribed.

ply with the regulations hereinafter prescribed.

"§ 15.2000 A request for certification and such supporting data as may be prescribed herein shall be accompanied by a complete set of lights described in the data. Such data shall include a copy of the instructions for the mounting of the lights in aircraft as furnished by the light manufacturer to purchasers.

"§ 15.2001 As the forward (right and left) lights are complementary they will be certificated as a unit. The rear (tail) light will be certificated as a separate unit.

"§ 15.2002 Forward lights are classified as follows:

"(a) Standard forward position lights.

"(b) Air Carrier forward position lights.

"(c) Auxiliary position lights.

"§ 15.201 Light distribution requirements. (See CAAM 15 for diagrams.)

"§ 15.2010 Definitions. Three dihedral angles hereinafter referred to as dihedral angle L, dihedral angle R, and dihedral angle A are defined as follows: dihedral angle L is formed by the intersection of two vertical planes, one passing through the forward axis of the light unit, as defined in the mounting instructions, and the other at an angle of 110 degrees to the first, measured to the left when looking away from the unit; dihedral angle R is formed by the intersection of two vertical planes, one passing through the forward axis of the light unit, as defined in the mounting instructions, and the other at an angle of 110 degrees to the first, measured to the right when looking away from the unit; and dihedral angle A (aft) is formed by the intersection of two vertical planes making dihedral angles of 70 degrees to the left and 70 degrees to the right, respectively, of a vertical plane passing through the rear axis of the light unit, as defined in the mounting instructions. Each dihedral angle shall be understood to include the bounding planes as well as the space between the planes.

"§ 15.2011 Standard forward position lights. Each standard forward position light shall have an intensity of not less than 3 candles in all directions in dihedral angle L for the left light and in dihedral angle R for the right light. Within these dihedral angles, respectively, the intensity in all directions shall equal or exceed the minimum values given in Table I according to the angle between the direction of measurement and the forward axis of the unit.

TABLE I.—Minimum Permissible Intensities in Any Plane Through the Forward Axis of the Unit.

At angles from forward axis not exceeding:	Intensity
60 degrees.....	4 candles
30 degrees.....	8 candles

In all directions in dihedral angle R for the left light and in dihedral angle L for

¹ These regulations amend the indicated section and paragraph of Part 71, Title 10, Code of Federal Regulations.

the right light, tolerance of 10 degrees will be allowed in which the intensity of these lights shall be reduced to not over 2 candles. In these same directions a further tolerance of an additional 10 degrees will be allowed in which the intensity shall be reduced to not more than 0.5 candle. In all directions in dihedral angle A a tolerance of 10 degrees will be allowed in which the intensity of these lights shall be reduced to a maximum intensity of 0.5 candle. In all directions outside the specified dihedral angle and the allowed tolerance angles for each unit, the stray light intensity shall not exceed 0.5 candle.

"§ 15.2012 *Air Carrier forward position lights.* Each air carrier forward position light shall have as intensity of not less than 3 candles in all directions in dihedral angle L for the left light and in dihedral angle R for the right light. Within these dihedral angles, respectively, the intensity in all directions shall equal or exceed the minimum values given in Table II according to the angle between the direction of measurement and the forward axis of the unit.

TABLE II.—Minimum Permissible Intensities in Any Plane Through the Forward Axis of the Unit

At angles from forward axis not exceeding:	Intensity
60 degrees.....	5 candles
30 degrees.....	10 candles
20 degrees.....	20 candles
15 degrees.....	30 candles
10 degrees.....	35 candles
5 degrees.....	40 candles

Within the same dihedral angles the intensities in the horizontal plane shall equal or exceed the minimum values given in Table III according to the angle between the direction of measurement and the forward axis of the unit.

TABLE III.—Minimum Permissible Intensities in the Horizontal Plane Through the Forward Axis of the Unit

At angles from forward axis not exceeding:	Intensity
60 degrees.....	5 candles
40 degrees.....	10 candles
30 degrees.....	20 candles
20 degrees.....	30 candles
10 degrees.....	40 candles

In all directions in dihedral angle R for the left light and in dihedral angle L for the right light, a tolerance of 10 degrees will be allowed in which the intensity of these lights shall be reduced to not over 10 candles. In these same directions a further tolerance of an additional 10 degrees will be allowed in which the intensity shall be reduced to not more than 1 candle. In all directions in dihedral angle A a tolerance of 10 degrees will be allowed in which the intensity of these lights shall be reduced to not more than 1 candle. In all directions outside the specified dihedral angle and the allowed tolerance angles for each unit, the stray light intensity shall not exceed 1 candle.

"§ 15.2013 *Auxiliary forward position lights.* Each auxiliary forward position light shall have an intensity of not less

than 20 candles in all directions not exceeding 30 degrees of the forward axis of the unit, measured in dihedral angle L for the left unit and in dihedral angle R for the right unit. Within the afore-described angles the intensity in all directions shall equal or exceed the minimum values given in Table IV according to the angle between the direction of the measurement and the forward axis of the unit.

TABLE IV.—Minimum Permissible Intensities in Any Plane Through the Forward Axis of the Unit

At angles from forward axis not exceeding:	Intensity
20 degrees.....	30 candles
10 degrees.....	40 candles

In all directions in dihedral angle R for the left light and in dihedral angle L for the right light, a tolerance of 10 degrees will be allowed in which the intensity of these lights shall be reduced to not over 8 candles. In these same directions a further tolerance of an additional 10 degrees will be allowed in which the intensity shall be reduced to not more than 0.5 candle. In all directions outside the specified dihedral angle and the allowed tolerance angles for each unit, the stray light intensity shall not exceed 0.5 candle.

"§ 15.2014 *Rear position lights.* Each rear position light shall have an intensity of not less than 4 candles in dihedral angle A. Within this dihedral angle the intensity in all directions not exceeding 70 degrees from the rear axis of the unit, shall be not less than 8 candles. In all directions in dihedral angle L and in dihedral angle R, a tolerance of 20 degrees will be allowed in which the intensity of this light must be reduced to a maximum stray light intensity of 1 candle. In all directions outside the specified dihedral angle and the allowed tolerance angles, the stray light intensity shall not exceed 1 candle.

"§ 15.202 *Color.* All left forward lights shall be aviation red, all right forward lights shall be aviation green, and all rear lights shall be aviation white. These colors are defined as follows:

"(a) Aviation red is a color having the following ICI chromaticity coordinates:

"y is not greater than 0.335 and
"z is not greater than 0.002

"(b) Aviation green is a color having the following ICI chromaticity coordinates:

"x is not greater than 0.440-0.320y
"x is not greater than y-0.170 and
"y is not less than 0.390-0.170x

"(c) Aviation white is a color having the following ICI chromaticity coordinates:

"x is not less than 0.350
"x is not greater than 0.540

"y-y_e is not numerically greater than 0.01

"y_e being the y coordinate of the Planckian radiator for which x_e=x.

"§ 15.203 *Light covers.* The lamp and reflectors shall be protected by a cover which shall be of non-combustible material and so constructed that it will not change color or shape, or cloud, or suffer any considerable loss of transmission in normal use. The coloring of those portions which are intended to transmit light shall be completely diffused through the material."

By the Authority.

[SEAL]

PAUL J. FRIZZELL,
Secretary.

[F. R. Doc. 39-2798; Filed, July 28, 1939; 12:41 p. m.]

TITLE 21—FOOD AND DRUGS

FOOD AND DRUG ADMINISTRATION

IN THE MATTER OF THE PUBLIC HEARING FOR PURPOSE OF RECEIVING EVIDENCE UPON BASIS OF WHICH REGULATION MAY BE PROMULGATED FIXING AND ESTABLISHING DEFINITION AND STANDARD OF IDENTITY FOR EACH OF THE FOLLOWING FOODS: TOMATO PUREE, TOMATO PASTE, TOMATO CATSUP, TOMATO JUICE

ORDER OF THE SECRETARY PROMULGATING REGULATIONS FIXING AND ESTABLISHING A REASONABLE DEFINITION AND STANDARD OF IDENTITY FOR THE FOOD KNOWN UNDER ITS COMMON OR USUAL NAME AS TOMATO JUICE

Pursuant to, and under and by virtue of, the authority and direction of the Federal Food, Drug, and Cosmetic Act (Sec. 701, 52 Stat. 1055; 21 U.S.C. 371 (e); Sec. 401, 52 Stat. 1046; 21 U.S.C. 341), and based upon substantial evidence of record at the hearing¹ in the above-entitled matter, detailed findings of fact are made, as follows:

Findings of Fact

1

Ordinarily the term "juice" means a clear liquid which separates from a fruit, and in many cases, a filtered liquid; associated with the word "tomato" it has come to mean both the liquid portion of the tomato and a part of the flesh which has been finely divided and carried in suspension.

2

Tomato juice is not a concentrated product.

3

Tomato juice is prepared from mature tomatoes of red or reddish varieties by a succession of treatments including washing before and after sorting, trimming, scalding, crushing and screening with or without heat to extract a part of the liquid and insoluble materials.

¹ 3 F.R. 3012 DI.

The seeds, skins, cores, and a portion of the fleshy material are excluded.

It may be homogenized or viscolized to prevent the fleshy material from settling out. Salt may be added. When it is sealed in containers, it is so heated before or after sealing as to prevent spoilage.

4

One firm heats the crushed tomatoes by live steam before extraction and heats the juice to a point calculated to compensate by evaporation for the water added by condensation. Steam condensate forms when steam is applied to crushed tomatoes. In the course of manufacture by this method, the amount of water thus added is approximately 11 percent. The evaporation removes a certain amount of the volatile flavoring constituents of the tomato. The reduction in volume by evaporation removes only part of the water which was added as steam condensate. The remainder of the reduction in volume comes from the evaporation of moisture originally present in the tomatoes. The finished product consists of partially concentrated tomato juice (some of the volatile flavoring constituents of the tomato having been lost in the evaporation) with sufficient added water to make up the approximate original volume of the tomato juice.

5

Most firms manufacturing tomato juice do not use a process whereby live steam comes directly in contact with the crushed tomatoes, and thereafter forms a steam condensate. Various manufacturers heretofore used such a process whereby live steam came in contact with crushed tomatoes, resulting in an adding of steam condensate, but there has been an abandonment of such use, with one exception as noted in Finding 4.

6

The natural constituents of the food commonly known as tomato juice are derived wholly from tomatoes, with salt as an optional ingredient.

7

Tomato juice varies in flavor, specific gravity, viscosity, and vitamin content.

8

It is impracticable to establish a reasonable definition and standard of identity for tomato juice with fixed specific gravity, ascorbic acid content, proportion of soluble to insoluble solids or percentage of other ingredients.

9

The foregoing findings of fact apply to a product prepared from yellow varieties of tomatoes except that when yellow varieties of tomatoes are used the product is known as and labeled yellow tomato juice.

Other findings suggested by the Presiding Officer are not found because they relate either to standards of quality or to matters governed by section 402 of the act. [cf. Sec. 10.000 (c), General Rules and Regulations Promulgated July 27, 1939]

Based upon the foregoing findings of fact, conclusions in the form of regulations which will promote honesty and fair dealing in the interest of consumers are hereby made and promulgated, as follows:

Regulations Under the Federal Food, Drug, and Cosmetics Act for Fixing and Establishing a Reasonable Definition and Standard of Identity for the Food Known Under Its Common or Usual Name as Tomato Juice

§ 53.000 *Tomato juice—Identity.* Tomato juice is the unconcentrated liquid extracted from mature tomatoes of red or reddish varieties, with or without scalding followed by draining. In the extraction of such liquid, heat may be applied by any method which does not add water thereto. Such liquid is strained free from skins, seeds, and other coarse or hard substances, but carries finely divided insoluble solids from the flesh of the tomato. Such liquid may be homogenized, and may be seasoned with salt. When sealed in a container it is so processed by heat, before or after sealing, as to prevent spoilage.

§ 53.005 *Yellow tomato juice—Identity.* Yellow tomato juice is the unconcentrated liquid extracted from mature tomatoes of yellow varieties. It conforms, in all other respects, to the definition and standard of identity for tomato juice prescribed in section 53.000.

It is ordered that the regulation hereby prescribed and promulgated shall become effective on January 1, 1940.

Issued this the 27th day of July 1939.

[SEAL] HARRY L. BROWN,
Acting Secretary of Agriculture.

[F. R. Doc. 39-2791; Filed, July 28, 1939;
10:19 a. m.]

IN THE MATTER OF THE PUBLIC HEARING FOR PURPOSE OF RECEIVING EVIDENCE UPON BASIS OF WHICH REGULATION MAY BE PROMULGATED FIXING AND ESTABLISHING DEFINITION AND STANDARD OF IDENTITY FOR EACH OF THE FOLLOWING FOODS: TOMATO PUREE, TOMATO PASTE, TOMATO CATSUP, TOMATO JUICE

ORDER OF THE SECRETARY PROMULGATING A REGULATION FIXING AND ESTABLISHING A REASONABLE DEFINITION AND STANDARD OF IDENTITY FOR THE FOOD KNOWN UNDER ITS COMMON OR USUAL NAME AS TOMATO CATSUP

Pursuant to, and under and by virtue of, the authority and direction of the Federal Food, Drug, and Cosmetic Act (Sec. 701, 52 Stat. 1055; 21 U.S.C. 371 (e); Sec. 401, 52 Stat. 1046; 21 U.S.C. 341), and based upon substantial evi-

dence of record at the hearing¹ in the above-entitled matter, detailed findings of fact are made, as follows:

Findings of Fact

1

Tomatoes used in the manufacture of tomato catsup are mature tomatoes of red or reddish varieties.

2

The terms "catsup," "ketchup," "catchup," are synonymous names for the same food.

3

The raw materials used are:

- (1) Whole tomatoes;
- (2) Residual tomato material from preparation for canning, consisting of pieces, cores, peelings, liquid, in whole or in part;
- (3) Residual tomato material from partial extraction of juice.
- (4) Tomato catsup is made from any one of the above sources of raw material, or any combination thereof.

4

When tomato catsup is manufactured in whole or in part from residual tomato material from preparation for canning or from partial extraction of juice, the label shall declare the raw-material ingredients used.

5

Tomato catsup is manufactured by crushing and straining whole tomatoes or residual tomato material from preparation for canning or from partial extraction of juice, so as to remove seeds, skins, cores, and other coarse or hard substances, and packing so as to prevent spoilage.

6

A sweetening agent is always added.

7

Sugar may be used as a sweetening agent.

8

A mixture of sugar and dextrose (refined corn sugar) may be used as a sweetening agent.

9

Dextrose (refined corn sugar) may be used in lieu of a part of the sugar; about 1½ to 1¾ parts of dextrose are required to replace 1 part of sugar; the use of dextrose in substitution for sugar creates a greater viscosity or body than the use of sugar alone; dextrose is not as sweet as sugar.

10

Salt is always added as seasoning.

11

A vinegar, usually distilled vinegar, is added.

¹ 3 F.R. 3012 DI.

12

Spices, in the form of whole or ground spice, or flavoring, in the form of spice oil, or both such spice and flavoring, are added.

13

Onions and garlic, either or both, are usually added.

14

The finished catsup is usually sealed in a container processed so as to insure its keeping, and such processing may be effected either before or after sealing.

Other findings suggested by the Presiding Officer are not found because they relate either to standards of quality or to matters governed by section 402 of the act. [cf. Sec. 10.000 (c), General Rules and Regulations Promulgated July 25, 1939]

Based upon the foregoing findings of fact, a conclusion in the form of a regulation which will promote honesty and fair dealing in the interest of consumers is hereby made and promulgated, as follows:

Regulation Under the Federal Food, Drug, and Cosmetic Act for Fixing and Establishing a Reasonable Definition and Standard of Identity for the Food Known Under Its Common or Usual Name as Tomato Catsup

§ 53.010 *Catsup, Ketchup, Catchup—Identity; Labeling of Optional Ingredients.* (a) Catsup, Ketchup, Catchup, is the food prepared from one or any combination of two or all of the following optional ingredients:

(1) The liquid obtained from mature tomatoes of red or reddish varieties.

(2) The liquid obtained from the residue from preparing such tomatoes for canning, consisting of peelings and cores with or without such tomatoes or pieces thereof.

(3) The liquid obtained from the residue from partial extraction of juice from such tomatoes. Such liquid is obtained by so straining such tomatoes or residue, with or without heating, as to exclude skins, seeds, and other coarse or hard substances. It is concentrated, and is seasoned with sugar or a mixture of sugar and dextrose (refined corn sugar), salt, a vinegar or vinegars, spices or flavoring or both, and onions or garlic or both. When sealed in a container it is so processed by heat, before or after sealing, as to prevent spoilage.

(b) When optional ingredient (2) is present, in whole or in part, the label shall bear the statement "Made From —" (or "Made in Part From —", as the case may be) "Residual Tomato Material from Canning". When optional ingredient (3) is present, in whole or in part, the label shall bear the statement "Made From —" (or "Made in Part From —", as the case may be) "Residual Tomato Material from Partial Extraction of Juice". If both such ingredients are present, such statements may

be combined in the statement "Made From —" (or "Made in Part From —", as the case may be) "Residual Tomato Material from Canning and from Partial Extraction of Juice". Wherever the name "Catsup," "Ketchup," or "Catchup" appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the statement or statements herein specified showing the optional ingredients present shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter.

It is ordered that the regulation hereby prescribed and promulgated shall become effective on January 1, 1940.

Issued this 25th day of July 1939.

[SEAL]

H. A. WALLACE,
Secretary of Agriculture.

[F. R. Doc. 39-2790; Filed, July 28, 1939; 10:19 a. m.]

TITLE 24—HOUSING CREDIT

FEDERAL HOUSING ADMINISTRATION

AMENDMENT OF REGULATION XIII OF THE REGULATIONS ISSUED BY THE ADMINISTRATOR IN CONNECTION WITH PROPERTY IMPROVEMENT LOANS UNDER TITLE I OF THE NATIONAL HOUSING ACT, AS AMENDED, EFFECTIVE JULY 1, 1939

Section 3 of Regulation XIII (appears as Section 501.13 (c) at 4 F.R. 2790 DI) is amended to read as follows:

(3) Shall be expended in erecting a new structure on real estate owned by the borrower in fee simple, or held by the borrower under a lease expiring not less than ten years after the maturity of the loan.

The Amendment contained herein is hereby declared to have the same force and effect as if included in and made a part of each Contract of Insurance, and shall be effective July 25, 1939.

STEWART McDONALD,
Federal Housing Administrator.

JULY 22, 1939.

[F. R. Doc. 39-2792; Filed, July 26, 1939; 1:48 p. m.]

TITLE 45—PUBLIC WELFARE

CIVILIAN CONSERVATION CORPS

PART 203—ENROLLMENT, DISCHARGE, HOSPITALIZATION, DEATH AND BURIAL OF ENROLLEES¹

§ 203.3 *Eligibility for selection and reselection—(a) Selection—(1) Function of the selecting agencies.* Selection and reselection of enrollees are the respon-

¹ Part 203, Chapter II, Title 45, Code of Federal Regulations is changed as follows: Paragraph (a), Section 203.3 and section 203.7 are superseded; Section 203.18 is amended as indicated.

sibilities of the State selecting agencies. Junior and veteran applicants are selected and certified to the War Department under definite policies as to eligibility approved by the Director, Civilian Conservation Corps, and duly announced to their respective field agents by the Federal agencies concerned. Men so selected and certified will present properly executed application forms duly signed by the authorized selecting agents of the Department of Labor or the Veterans' Administration, as the case may be. The War Department does not participate in selection or reselection.

(2) *Excluded from selection and enrollment.* The following classes of persons are excluded from selection and enrollment:

(i) Those who are not male citizens of the United States.

(ii) Those (other than war veterans, and not to exceed one leader, one mess steward, three cooks, and five project assistants per junior company) who are married and/or who would not be, during the entire period of enrollment, between the ages of 17 and 23 years, both inclusive.

(iii) Those who have been previously dishonorably or administratively discharged.

(iv) Those who have been convicted by a civil or military court of an offense which may be punished by death or imprisonment for a term exceeding 1 year.

(v) Those serving a current term of probation or parole by reason of a sentence of a criminal court because of the commission of any crime or misdemeanor.

(vi) Civil law enforcement officers such as justices of the peace, sheriffs, game wardens, and their deputies.

(vii) Members of the National Guard of a State, a territory, or the District of Columbia.

(viii) Unworthy enrollees. (50 Stat. 319) [Par. 19a, C.C.C. Regs., W. D., Dec. 1, 1937; amended by C 31, July 18, 1939]

§ 203.7 *Enrollment—(a) Oath, duration, and place.* Certified selectees who pass the required physical examination upon subscribing to the oath on C.C.C. Form No. 1 will be enrolled, for periods of not less than 6 months, at—

(1) Place of acceptance, when the physical examination is given at that place and the corps area commander deems it expedient to direct such action, or,

(2) Reconditioning or work camps designated by the corps area commander.

(b) *Action in case of fraudulent application for enrollment.* An applicant rejected by reason of falsification of qualifications is not entitled to transportation in kind nor subsistence en route to place of selection or to his home.

(c) *Action in case of fraudulent and erroneous enrollment.* (1) Persons in any of the classifications listed in paragraphs (a) (2) and (b), section 203.3, if enrolled or reenrolled fraudulently, will be dishonorably discharged by the company commander for "fraudulent enrollment" and will not be paid for any period subsequent to the last payment made to them prior to the discovery of the fraud. Transportation will be in accordance with paragraph (b) (6), section 203.18.

(2) (i) Persons in any of the classifications listed in paragraphs (a) (2) and (b), section 203.3, if erroneously enrolled or reenrolled without fraud will be forthwith administratively discharged, except that members of the National Guard and civil law enforcement officers may, in such cases, be honorably discharged. Except in the case of those listed in paragraphs (a) (2) (i) and (ii) and the first subparagraph of paragraph (b), section 203.3, persons administratively discharged under authority of this paragraph will be paid full accumulated cash allowance to date of discharge and provided with the usual subsistence allowance and transportation. See paragraph (c), section 203.18.

(ii) Those erroneously enrolled or reenrolled without fraud under paragraphs (a) (2) (i) and (ii) and the first subparagraph or paragraph (b), section 203.3 and administratively discharged under the provisions of (i) above will not be paid for any period subsequent to the last payment made to them prior to the discovery of the error, but will be provided with transportation in accordance with paragraph (c), section 203.18.

(3) It will be the duty of the company commander upon discovering that an enrollee has become a member of the Civilian Conservation Corps through falsification of qualifications for selection to report the facts to the appropriate State selecting agency whose field agents originally certified the individual for enrollment. Except as noted in (1) and (2) above, discharge from the Civilian Conservation Corps is not mandatory in cases of revealed falsification of qualification. Corps area commanders will determine the final disposition of each case, considering the recommendation received from the State selecting agency, and discharge under the provision of this subparagraph will be the exception rather than the rule. (50 Stat. 319) [Par. 25c, C.C.C. Regs., W.D., Dec. 1, 1937; amended by C 31, July 18, 1939] § 203.18 *Transportation and travel allowances.*

(b) *Transportation in kind from places of discharge.*

(7) *Dishonorable discharge.* When an enrollee is given a dishonorable discharge, he will not be furnished either transportation in kind or travel allowances of any nature, except that he will be permitted to return to his home or

place of acceptance at Government expense with the next group of discharged enrollees leaving the camp from which he was discharged at the end of their enrollments or, in case he is in a foreign corps area, with those being returned to their home corps area for discharge. When he is permitted to travel as authorized above, he will be furnished all allowances that are furnished to the other enrollees or ex-enrollees with whom he is traveling, except that, when train accommodations permit, his space assignment will be in a coach, not a sleeping car or parlor car. (See paragraph (c) below.)

(c) *Transportation of enrollees discharged administratively.* Enrollees who are discharged administratively will be furnished transportation only (no berths, parlor-car seats, or staterooms), regardless of the length of the journey, on the basis as prescribed in paragraph (b) above. Transportation requests will be addressed to rail carriers and endorsed in the transportation class space with the words "Good in coaches only." See paragraph (b) (7) above.

(50 Stat. 319) [Par. 66b and d, C.C.C. Regs., W.D., Dec. 1, 1937; amended by C 31, July 18, 1939]

[SEAL]

E. S. ADAMS,
Major General,
The Adjutant General.

[F. R. Doc. 39-2788; Filed, July 28, 1939; 9:28 a. m.]

TITLE 47—TELECOMMUNICATION

CHAPTER I—FEDERAL COMMUNICATIONS COMMISSION

PART 8—RULES GOVERNING SHIP SERVICE*

TABLE OF CONTENTS

DEFINITIONS

Authority

Sec.	
8.1	Communications Act.
8.2	Ship Act.
8.3	Safety Convention.
8.4	Commission.
8.5	Standards of Good Engineering Practice for Ship Stations.

Certificates

8.6	Exemption Certificate.
8.7	Safety Certificate.
8.8	Safety Radiotelegraph Certificate.

*Sec. 4, 44 Stat. 1163; 47 U.S.C. 84 (f), rules promulgated thereunder continued in effect by Sec. 604, 48 Stat. 1103; 47 U.S.C. 604—Sec. 4 (i), 48 Stat. 1066; 47 U.S.C. 154 (i)—Sec. 303 (r), 50 Stat. 191; 47 U.S.C. 303 (r)—Sec. 351 (a) (2), 50 Stat. 192; 47 U.S.C. 351 (a) (2)—Sec. 352 (b), 50 Stat. 192; 47 U.S.C. 352 (b)—Sec. 353, 50 Stat. 193; 47 U.S.C. 353—Sec. 354 (g), 50 Stat. 193; 47 U.S.C. 354 (g)—Sec. 355, 50 Stat. 194; 47 U.S.C. 355—Sec. 356, 50 Stat. 194; 47 U.S.C. 356—Sec. 359, 50 Stat. 195; 47 U.S.C. 359—Sec. 362, 50 Stat. 196; 47 U.S.C. 362.

†Adopted by the FCC on July 12, 1939, effective Oct. 1, 1939.

Installations

Sec.	
8.9	Main installation.
8.10	Emergency or reserve installation.
8.11	Emergency power supply.
8.12	Direction finder.
8.13	Energize.

Transmitters

8.14	Emergency transmitter.
8.15	Main transmitter.

Receivers.

8.16	Automatic alarm receiver.
8.17	Direction finder receiver.
8.18	Emergency receiver.
8.19	Main receiver.

Service of a Ship Station

8.20	Maritime mobile service.
8.21	Ship service.
8.22	Public ship service.
8.23	Private ship service.
8.24	Emergency communication.
8.25	Routine communication.
8.26	Hours of service.

Stations

8.27	Ship station.
8.28	Ship telegraph station.
8.29	Ship telephone station.
8.30	Maritime mobile station.

Watch

8.31	Radio watch.
------	--------------

GENERAL

8.41	Interference to be minimized.
8.42	Order of priority of communications.
8.43	Mobile station in distress.
8.44	Transmission of alarm signal.
8.45	Repetition of distress call.
8.46	Repetition of alarm signal.
8.47	Interference from A-2 emission.
8.48	Priority of operation of ship station.
8.49	Operating power.
8.50	Communication with coastal harbor stations.

LICENSE

8.61	Ship station license.
8.62	Classes of ship stations.
8.63	Posting of licenses.
8.64	Lifeboat stations.
8.65	Cable marker buoy.
8.66	Authority to communicate with amateur stations.
8.67	Communication with foreign amateur stations.
8.68	Use of A-1 and A-2 emission by ship telephone stations.
8.69	Use of special emission.
8.70	Points of communication.
8.71	Damped wave emission.

FREQUENCIES

8.81	Ship service.
8.82	International calling and distress frequency.
8.83	Use of distress frequency.
8.84	Use of other frequencies for distress.
8.85	Use of 143 kilocycles and other calling frequencies.
8.86	Use of working frequencies.
8.87	Operation in territorial waters of the United States.
8.88	Use of frequencies by foreign ships.
8.89	Use of radio by foreign men-of-war.
8.90	Direction finder frequency.
8.91	Additional frequencies.
8.92	Record of frequency adjustments.
8.93	Control of carrier wave in telephony.
8.94	Shared use of 2738 kilocycles.
8.95	Use of frequency 2738 kilocycles.
8.96	Frequency tolerance.
8.97	Frequency measurement.

RADIO INSTALLATION

8.111	Approval of installation and electrical wiring.
8.112	Installation on board cargo vessels.
8.113	Separate main and emergency installations.
8.114	Requirements of main installation.

- Sec.
8.115 Requirements of emergency or reserve installation.
8.116 Use of emergency power supply on board a cargo ship.
8.117 Use of emergency installation on board a passenger ship.
8.118 Tests of emergency installation.
8.119 Proof of fuel capacity, emergency engine-driven generator.
8.120 Proof of capacity, emergency batteries.
8.121 Electrical load, emergency installation.
8.122 Emergency power supply, conclusion of demonstration.
8.123 Location and ventilation of source of power.
8.124 Specifications and operation of battery and engine-driven generator.
8.125 Type of engine.
8.126 Routing of electrical power conductors.
8.127 Change from transmission to reception.
8.128 Crystal rectifier.
8.129 Percentage of modulation.

REQUIREMENTS FOR APPROVAL OF TRANSMITTERS FOR USE ON BOARD SHIPS SUBJECT TO TITLE III, PART II OF THE COMMUNICATIONS ACT

- 8.141 Approved transmitters.
8.142 Requirements for a main transmitter.
8.143 Requirements applicable only to a main transmitter in existence prior to February 1, 1938.
8.144 Requirements for an emergency transmitter.
8.145 Nameplate on transmitters.
8.146 Use of additional frequencies.
8.147 Waiver on small passenger vessels.
8.148 Type approval.

AUTO ALARM

- 8.161 Approval by Commission.
8.162 Type approval.
8.163 Auto alarm installation.
8.164 Serial number.
8.165 Notification of installation.
8.166 Daily tests.
8.167 Reports.

INTERIOR COMMUNICATION SYSTEM

- 8.171 Necessity for communication system.
8.172 Type of communication system.
8.173 Efficiency and termination of communication system.
8.174 Communication system between the bridge and other radio operating positions.
8.175 Location of direction finder.

CLOCK

- 8.181 Clock for intermediate-frequency ship stations.
8.182 Clock aboard compulsorily-equipped vessels.
8.183 Time-reference for other ship stations.

DIRECTION FINDER

- 8.191 Direction finder.
8.192 Approval of direction finder.

LIFEBOAT INSTALLATIONS

- 8.201 Lifeboat radio stations.
8.202 Availability and use of lifeboat radio power.
8.203 Details of lifeboat radio installation.
8.204 Inspection of lifeboat radio installation.
8.205 Examination of lifeboat radio batteries.
8.206 Lifeboat radio instructions.
8.207 Demonstration of six hour provision; lifeboats.
8.208 Charging circuit on new vessels.

REGULATION OF WATCH

- 8.211 Report to bridge.
8.212 Use of auto alarm.
8.213 Auxiliary antenna.

RADIO LOG

- Sec.
8.221 Radio log for safety purposes.
8.222 Radio log during hours of service.
8.223 Disposition of logs.

SPARE PARTS

- 8.231 Tools and spare parts in general.
8.232 Necessary spare parts.
8.233 Necessary auxiliary equipment.
8.234 Additional spare parts for specific equipment.
8.235 Additional spare parts in general.
8.236 Spare parts and auxiliary equipment for auto alarm, if auto alarm is required.
8.237 Location of spare parts.

INSPECTIONS

- 8.251 Station available for inspection.
8.252 Application for inspection.
8.253 Convention Certificates.
Appendix A.
Appendix B.

DEFINITIONS¹

The following definitions shall apply to the provisions of this chapter:

Authority

§ 8.1 *Communications Act.* The term "Communications Act" means the Communications Act of 1934, as amended.*†

§ 8.2 *Ship Act.* The term "Ship Act" means the Act approved June 24, 1910, as amended, requiring apparatus and operators for radio communication on certain Great Lakes steamers.*†

§ 8.3 *Safety Convention.* The term "Safety Convention" means the International Convention for the Safety of Life at Sea in force² and the regulations referred to therein.*†

§ 8.4 *Commission.* The term "Commission" means the Federal Communications Commission.*†

§ 8.5 *Standards of good engineering practice for ship stations.* The term "Standards of Good Engineering Practice for Ship Stations" as used in this Chapter means a supplemental publication bearing this title as may be hereafter approved and promulgated by the Commission.*†

Certificates

§ 8.6 *Exemption certificate.* The term "Exemption Certificate" means a certificate issued to a ship which is granted exemption from applicable provisions of the Safety Convention.*†

§ 8.7 *Safety certificate.* The term "Safety Certificate" means a certificate issued upon application, after inspection and survey by proper authorities, to a passenger ship which complies in an efficient manner with the requirements of the Safety Convention.*†

§ 8.8 *Safety radiotelegraph certificate.* The term "Safety Radiotelegraphy Certificate" means a certificate issued upon application, after inspection by proper authorities, to any ship, other

¹ For additional definitions see Appendix A.
² The International Convention for the Safety of Life at Sea, London, 1929, became effective for the United States on November 7, 1936.

than a passenger ship, which complies in an efficient manner with the requirements of the Safety Convention.*†

Installations

§ 8.9 *Main installation.* The term "main installation" means a radio installation on board a vessel, including a main transmitter and a main receiver, capable of being used for transmitting and receiving signals to and from other stations in the maritime mobile service; independent of the emergency or reserve installation on a passenger or cargo ship; or under specified conditions⁴ independent of the emergency power supply on a cargo ship.*†

§ 8.10 *Emergency or reserve installation.* The term "emergency or reserve installation" or "emergency installation" means a radio installation on board a vessel, including an emergency transmitter, an emergency receiver, emergency electric lights and an emergency power supply, capable of being used for transmitting and receiving signals to and from other stations in the maritime mobile service when energized solely by the emergency power supply.*†

§ 8.11 *Emergency power supply.* The term "emergency power supply" means an immediately available source or sources of electrical power on board a ship, independent of the propelling power of the ship and any other electrical system, capable of simultaneously energizing the emergency transmitter, the emergency receiver, and the radio station emergency electric light(s).*†

§ 8.12 *Direction finder.* The term "direction finder" means a radio receiving device which permits determination of the line of travel of radio waves at the point of reception.*†

§ 8.13 *Energize.* The term "energize", as applied in these regulations, to transmitters, receivers and other component equipment of ship radio installations, means to supply with electrical power as necessary to provide normal and effective operation of this equipment.*†

Transmitters

§ 8.14 *Emergency transmitter.* The term "emergency transmitter" means a transmitter immediately available in a ship station for emergency communication and capable of being energized solely by the emergency power supply.*†

§ 8.15 *Main transmitter.* The term "main transmitter" means a radio transmitter regularly available in a ship station for routine communication which ordinarily is energized by a source of power other than the emergency power supply.*†

³ The International Convention for the Safety of Life at Sea, London, 1929, became effective for the United States on November 7, 1936.

⁴ See Section 354 (a) of the Communications Act.

Receivers

§ 8.16 *Automatic alarm receiver.* The term "automatic alarm receiver" means a complete receiving, selecting, and warning device capable of being actuated automatically by intercepted radio-frequency waves forming the international automatic alarm signal, as this signal is specified by the International Radio Regulations in force.*†

§ 8.17 *Direction finder receiver.* The term "direction finder receiver" means a receiver which is a component of a radio direction finder.*†

§ 8.18 *Emergency receiver.* The term "emergency receiver" means a receiver immediately available in a ship station for emergency communication and capable of being energized solely by the emergency power supply.*†

§ 8.19 *Main receiver.* The term "main receiver" means a receiver regularly available in a ship station for routine communication which ordinarily is energized by a source of power other than the emergency power supply.*†

Service of a Ship Station

§ 8.20 *Maritime mobile service.* The general term "maritime mobile service" means a radio service carried on between maritime mobile stations and land stations, and by maritime mobile stations communicating among themselves.*†

§ 8.21 *Ship service.* The term "ship service" means a radiocommunication service carried on between ship stations and coastal stations or between ship stations and maritime mobile stations.*†

§ 8.22 *Public ship service.* The term "public ship service" means a ship service open to public correspondence.*†

§ 8.23 *Private ship service.* The term "private ship service" means a ship service not open to public correspondence.*†

§ 8.24 *Emergency communication.* The term "emergency communication" with respect to ship stations means the transmission or reception of distress, alarm, urgent or safety signals, or messages relating thereto, or any matter relating to the safety of life or property, or occasional operation of equipment for determining whether or not the radio installation is in good working condition.*†

§ 8.25 *Routine communication.* The term "routine communication" with respect to ship stations means all operation authorized for such stations which is not included in the definition of "emergency communication."*†

§ 8.26 *Hours of service.* The term "hours of service" or "duration of service" means the time during which a ship station is held open for the exchange of message traffic with other stations in the maritime mobile service.*†

Stations

§ 8.27 *Ship station.* The term "ship station" means a radio station licensed

for ship service and located on board a ship which is not permanently moored.*†

§ 8.28 *Ship telegraph station.* The term "ship telegraph station" means a ship station licensed to use, and capable of using, type A-1, A-2, or B⁵ emission.*†

§ 8.29 *Ship telephone station.* The term "ship telephone station" means a ship station licensed to use, and capable of using, type A-3 emission for speech transmission.*†

§ 8.30 *Maritime mobile station.* The general term "maritime mobile station" means a ship station or an aircraft station at sea.*†

Watch

§ 8.31 *Radio watch.* The term "radio watch" or "watch" means the service performed by a qualified operator when on duty in the radio room of a vessel listening for signals of other stations on the international calling and distress frequency, 500 kilocycles (410 kilocycles on the Great Lakes), at least during each international silent period and at all other times except when such operator, in conformity with the International Radio Regulations in force and subject to authority of the master, is engaged in transmitting or receiving signals or messages on any authorized frequency, to or from any station in the maritime mobile service, or in receiving from any station time signals, weather reports, hydrographic reports, reports regarding aids to navigation, authorized press material, or information regarding the safety of life or property at sea.*†

GENERAL

§ 8.41 *Interference to be minimized.* Before transmitting, a ship station shall make sure that it will not produce harmful interference with communications being carried on within its range. If such interference is likely, the station shall wait until the existing communications, which it may disturb, have been concluded; with due regard, nevertheless, for the priority of communications designated by Section 8.42.*†

§ 8.42 *Order of priority of communications.* The order of priority of radiotelegraph and radiotelephone communications in the maritime mobile service on any frequency used for this service shall be as follows:

- (a) Distress calls, distress messages, and distress traffic.
- (b) Communications preceded by an urgent signal.
- (c) Communications preceded by a safety signal.
- (d) Communications relative to radio direction-finder bearings.

* Beginning January 1, 1940, type B emission is not authorized for ship stations of U. S. registry, except in case of distress. See Section 8.71.

- (e) Government radiotelegrams for which priority right has not been waived.
- (f) All other communications.*†

§ 8.43 *Mobile station in distress.* No provision of these rules or of any regulations shall prevent a mobile station in distress from using any means available to it for drawing attention, signaling its position, and obtaining help.*†

§ 8.44 *Transmission of alarm signal.* When a distress call has been transmitted and was not preceded by the international automatic alarm signal, a station in the maritime mobile service (except on the Great Lakes) within the general vicinity of the station which transmitted the distress call, may transmit the alarm signal (using type A-2 or B emission) on the frequency 500 kilocycles upon authorization of the master or other person responsible for the station, provided every reasonable precaution is observed not to interfere with the acknowledgment of receipt of the distress call nor with distress traffic already in progress.*†

§ 8.45 *Repetition of distress call.* If a ship station has heard a distress call or distress message for which acknowledgment of receipt has not been given promptly, and the ship station itself is not in a position to render assistance, the ship station, subject to authority of the master, shall make every effort possible to attract the attention of any station in the maritime mobile service which appears to be in a position to render assistance, and for this purpose transmission of the distress call and distress message may be repeated on 500 kilocycles (410 kilocycles on the Great Lakes) and on such other frequencies as may be deemed necessary. Except on the Great Lakes, the ship station if authorized by the master may transmit for this purpose the international automatic alarm signal on the frequency 500 kilocycles (using type A-2 or B emission) prior to repetition of the distress call and message. In the event the alarm signal is transmitted, a sufficient period of time to allow operators warned by the alarm signal to go on watch shall be observed after transmission of the alarm signal and before retransmission of the distress message.*†

§ 8.46 *Repetition of alarm signal.* Except on the Great Lakes, a ship station intercepting an international automatic alarm signal which appears to be not duly effective by reason of improper timing, improper type of emission, insufficient signal strength, interference, or excessive deviation from 500 kilocycles, if authorized, by the master, may repeat the transmission of this signal on the frequency 500 kilocycles (using type A-2 or B emission) to be followed by a repetition of the distress call and distress message provided all reasonable precaution is taken by such station not to interfere with acknowledgment of receipt of the distress call nor with distress traffic already in progress.*†

§ 8.47 *Interference from A-2 emission.* Beginning January 1, 1941, the use of A-2 emission, which is generated by abrupt interruptions or reductions of the carrier wave, at an audible frequency or frequencies, without reference to the usual interruptions caused by ordinary telegraphic keying, shall be prohibited for ship stations on frequencies below 30,000 kilocycles except when necessary for emergency communication.*†

§ 8.48 *Priority of operation of ship station.* From the standpoint of interference, the operation of a ship radio station, including receiving equipment, auto alarm, and direction-finder, installed on board a vessel for safety purposes in compliance with law, shall have priority over the operation of any other radio apparatus on board the same vessel.*†

§ 8.49 *Operating power.* The operating power of ship stations shall be computed in conformity with the terms of Section 2.79 of Part 2: *Provided, however,* That the multiplying factor to which reference is made in paragraph (a) and the method of measuring field intensity to which reference is made in paragraph (c) of Section 2.79, shall be in accordance with the Standards of Good Engineering Practice for Ship Stations promulgated by the Commission.*†

§ 8.50 *Communication with coastal harbor stations.* All ship telephone stations, when operating on a frequency below 3500 kilocycles or above 30,000 kilocycles for communication with a coastal harbor station open to public correspondence, shall communicate with the nearest station of this class whenever practicable under the prevailing conditions of transmission and reception.*†

LICENSE

§ 8.61 *Ship station license.* All new or renewal ship station licenses normally will be issued to expire at 3:00 a. m., E. S. T. on a date three years from the date on which they become effective.*†

§ 8.62 *Classes of ship stations.* Ship stations will be licensed by classes according to their hours of service as follows:

(a) *First Class:* These stations shall carry on a continuous service whenever the vessel is being navigated or is outside a harbor or port.

(b) *Second Class:* These stations shall carry on a designated service of limited duration whenever the vessel is being navigated or is outside a harbor or port; at least during the period designated for ship stations of the second category in the appendix of the General Radio Regulations in force annexed to the International Telecommunication Convention in

force, or as otherwise designated by the station license.

(c) *Third Class:* These stations, when operated, shall carry on a service the duration of which is undetermined or which is determined by the master of the vessel.*†

§ 8.63 *Posting of licenses.* The original ship radio station license, and the original license of each operator of the ship station while he is on duty therein, shall be posted in a conspicuous place in the associated radio operating room on board the ship, except when any operator license has been submitted to the Commission in accordance with relevant provisions of Part 13.*†

§ 8.64 *Lifeboat stations.* Properly licensed lifeboat radio transmitting equipment may be operated for maintenance tests and emergency communication under authority of the regular license of the ship station without a separate license posted in the lifeboat. The call signals to be used by a lifeboat operating under this rule shall be the regularly assigned call of the ship station to which the lifeboat is regularly attached, to be followed by the international break sign, BT, and the number of the lifeboat.*†

§ 8.65 *Cable marker buoy.* Provided the transmitting equipment to be used on a cable marker buoy is described in the application for ship radio station license and in the ship station license for a cable-repair ship with which the buoy is associated, such equipment may be operated on the frequency 278 kilocycles for direction finding purposes, under the regular license of the ship station, with A-1 or A-2 emission and a maximum power of ten watts. The call signals to be used for a transmitter operating under this Section shall be the regularly assigned call of the ship station with which the buoy is associated, to be followed by the international break sign, BT, and the identifying number of the buoy. The buoy transmitter shall be continuously monitored by a regularly licensed operator aboard the associated cable repair ship. Should a frequency deviation in excess of 0.5 percent or interference to the service of any other station be reported or observed, the radiation of the transmitter shall be suspended until the deviation is eliminated or until the transmitter can be operated without causing interference.*†

§ 8.66 *Authority to communicate with amateur stations.* Upon formal application being made and duly executed, including a supplemental statement in reference to conditions (a) and (b) hereinafter specified, the Commission may grant a license, modification of license,

renewal of license or special temporary authority, permitting a ship telegraph station, on board a non-commercial vessel or on board a vessel to be used for scientific research or expedition, to transmit on ship telegraph frequencies above 4,000 kilocycles designated in the license of such ship station, for the secondary purpose of exchanging radiotelegraph communications directly with licensed amateur stations, on condition that transmission for this purpose shall not interfere with the primary use of these frequencies for normal ship service, and provided the applicant makes a satisfactory showing that:

(a) The messages to be exchanged with amateur stations will contain no material relating directly or indirectly to a commercial transaction.

(b) Unusual circumstances will be encountered during the contemplated voyage(s) which will make direct communication with amateur stations extremely beneficial to persons on board the vessel or to the person(s) responsible for the scientific research or expedition for which the vessel is to be used.*†

§ 8.67 *Communication with foreign amateur stations.* Under the provisions of Section 8.66, communication with amateur stations of foreign countries shall be limited to communications with such stations as are authorized to communicate with the ship station concerned; in addition, the nature of the communications exchanged with foreign amateur stations shall be in accordance with the General Radio Regulations in force of the International Telecommunication Convention in force and in conformity with the regulations of the foreign administration having jurisdiction over the amateur station(s) involved.*†

§ 8.68 *Use of A-1 and A-2 emission by ship telephone stations.* Ship telephone stations are authorized to use A-1 and A-2 emission for calling, for brief testing, for the transmission of brief service messages and for communication in an emergency involving the safety of life or property.*†

§ 8.69 *Use of special emission.* Upon application, ship stations normally licensed to transmit on frequencies above 4000 kilocycles may be granted authority to use special emission upon a secondary basis, provided the applicant makes a satisfactory showing of the need for this type of emission and upon condition that no increase in interference to the service of other stations will result.*†

§ 8.70 *Points of communication.* Unless otherwise specified in the license, a ship station is authorized to communicate with coastal stations and maritime mobile stations, without regard to the country to which these stations belong, and with mobile press stations in conformity with Sections 11.11 and 11.12 of Part 11.*†

* This Section relates in particular to the electro-mechanical transmitting device commonly known as a "chopper", employed mainly in connection with arc transmitters and electron-tube transmitters of early design.

† Operation of the lifeboat radio transmitting equipment will be specifically authorized by the regular ship station license when it has been described in the application for such license.

§ 8.71 *Damped wave emission.* (a) Licenses, or any other instruments of authorization for the operation of any ship radio station using, or proposing to use, transmitting apparatus employing damped-wave emission, will not be issued after December 31, 1939.

(b) Prior to January 1, 1940, a license will be issued for the operation of any ship radio station using, or proposing to use, transmitting apparatus employing damped-wave emission only if such apparatus was installed on board the ship prior to January 1, 1930. Subject to this limitation a license will be issued authorizing until January 1, 1940, the operation of damped-wave transmitting apparatus on board a ship station on the following frequencies:

Calling: 500 kc (other than Great Lakes)
410 kc (Great Lakes only)
Working: 375 and 425 kc.

(c) The provisions of this Section supersede any authorization contained in existing ship station licenses issued by the Commission that may be in conflict herewith.*†

FREQUENCIES

§ 8.81 *Ship service.* The following frequencies in kilocycles are allocated to the following types of ship stations; provided that in assigning any frequency designated in paragraphs (b) and (c) of this section, the use of that frequency may be restricted to communication with coastal telephone or coastal harbor stations in one or more specified geographical areas.

(a) To ship telegraph stations for communication primarily with coastal telegraph stations upon condition that emission on frequencies within the band 143-160 kc, inclusive, shall be A-1 only:

143 Calling	4160
152	4165
153	5510
154	5515
155	5520 Calling
156	5525
157	5530
158	6210 ¹¹ Calling
160	6220
355 ⁸	6230
375 ⁹ Direction-finding only	6240 ¹²
394	8240
400	8250
410 Calling only on Great Lakes, working in other regions	8260
425	8280 Calling
454	8290
468	8300
500 ¹⁰ Calling only, not for use on Great Lakes	8320
4140 Calling	8330
4145	11,025
4150	11,040 Calling
	11,055
	11,070
	11,085
	12,360
	12,375
	12,390

* Available for non-government stations for assignment only to United States Maritime Commission vessels for communication with government stations.

⁸ See Sec. 8.90.

⁹ See Sec. 8.82.

¹¹ Not available for use on the Great Lakes or on inland waters.

¹² Available for use by ship telegraph stations provided no interference is caused to the operation of any coastal telegraph station.

12,420 Calling	16,660
12,435	16,680
12,450	22,025
16,460	22,050
16,480	22,080 Calling
16,500	22,100
16,520	22,125
16,560 Calling	22,150
16,580	

(b) To ship telephone stations for communication primarily with coastal telephone stations:

4402.5	6650	13,200	17,600
4412.5	6660	13,210	17,610
4422.5	6670	13,220	17,620
4457.2	8810	13,230	17,640
	8820	13,245	17,660
	8830	13,260	17,680
	8840	13,275	23,000
	8850		

(c) To ship telephone stations for communication primarily with coastal harbor stations:

2110	2134	2166	2198
2118	2142	2174	2206
2126	2158	2182	

30,540	35,340	37,580	39,580
31,260	35,660	37,940	132,540
31,660	37,260	39,220	137,160

(d) To ship telephone stations for communication primarily with other ship telephone stations:

2738	35,860	37,660
------	--------	--------

(e) To ship telegraph stations for communication primarily with other ship telegraph stations:

3115 ¹³	35,860
3120	37,660

*†

§ 8.82 *International calling and distress frequency.* The international calling and distress frequency is 500 kilocycles. In the Great Lakes region the frequency 410 kilocycles shall be used for calling and distress purposes in lieu of the international calling and distress frequency 500 kilocycles.*†

§ 8.83 *Use of distress frequency.* The international calling and distress frequency 500 kilocycles (410 kilocycles on the Great Lakes only) shall be used by ship stations and aircraft stations in requesting help from the maritime services. In addition it may be used only for calls and replies, for distress traffic, for urgent and safety messages, and for operating signals.*

§ 8.84 *Use of other frequencies for distress.* In case of distress, if it is not possible to use the international distress frequency, any station of the maritime mobile service may use any other frequency available to it to call attention, report the position of the ship or aircraft in distress, and obtain help.*†

§ 8.85 *Use of 143 kilocycles and other calling frequencies.* In no case shall the calling frequencies 143 and 500 kilocycles (410 kilocycles on the Great Lakes) be used for working purposes except as may be necessary for the handling of distress, urgent, or safety messages. Other calling frequencies may be used for working purposes, provided no interference is caused to calls from mobile stations.*†

¹³ Not available for use on the Great Lakes or on inland waters.

vided no interference is caused to calls from mobile stations.*†

§ 8.86 *Use of working frequencies.* Frequencies designated in a ship station license as "working" may be used for all purposes for which calling frequencies are authorized and in addition may be used for the handling of regular message traffic.*†

§ 8.87 *Operation in territorial waters of the United States.* The operation of any radio station on board any vessel within the territorial waters of the United States shall be in accordance with the following limitations:

(a) The frequencies used shall be those allocated for use by mobile stations by the International Radio Regulations in force.

(b) The use of radio equipment shall not interfere with the normal communication of other radio services, and the minimum power necessary for establishing communication shall be used.

(c) Only messages originating with passengers or members of the crew on board a ship may be transmitted; i. e., no message shall be handled unless it is one that normally would be routed in the maritime mobile service.

(d) Except for the handling of emergency communications, a ship station on board a vessel alongside the dock or at anchor in a harbor of the United States shall not use damped waves (type B emission).*†

§ 8.88 *Use of frequencies by foreign ships.* Except for the handling of emergency communications relating to the safe navigation of the vessel, and the handling of messages relating to ships in distress, the privileges designated by Section 8.87 are extended only to those foreign ships which belong to countries extending similar privileges to ships of United States registry in their territorial waters.*†

§ 8.89 *Use of radio by foreign men-of-war.* The use of radio by foreign men-of-war in United States ports and territorial waters is prohibited unless authorized by appropriate United States authorities on frequencies allocated to the mobile service by the International Radio Regulations in force, upon condition that no interference will result to the service carried on by other stations. Normally, requests from foreign men-of-war to use their radio equipment for communications while in United States ports and territorial waters shall be made to one of the naval district commanders ¹⁴ or, after arrival in port, to the

¹⁴ The headquarters of District Commandants concerned are located at Boston, New York, Philadelphia, Norfolk, Charleston, South Carolina; San Diego, San Francisco, Seattle, Pearl Harbor, Territory of Hawaii; Balboa, Canal Zone, and Cavite, Philippine Islands. In addition to having senior naval officers stationed at these places, the Navy has officers performing various duties at practically all other important United States ports. The authority to grant such requests is lodged in the official who is authorized to receive the request.

senior United States naval officer present. When a naval officer is not present, requests shall be made to the port authorities, or to the Navy Department, Washington, D. C.*†

§ 8.90 *Direction finder frequency.* The frequency 375 kilocycles shall be used only for transmissions relative to determining the positions of mobile stations by means of radio direction finding stations.*†

§ 8.91 *Additional frequencies.* In addition to the frequencies designated in the license of a ship station, such station, when communicating with a land station, may transmit:

(a) On any working frequency between 110 and 194 kilocycles when directed to do so by a coastal telegraph station operating in this band, provided no interference results to the service of any other land or fixed station, and provided that on frequencies below 160 kilocycles the emission shall be A-1 only. Under the provisions of this section, the operating frequency of the ship station shall be specifically designated by the coastal station.

(b) On a working frequency within the band 385 to 23,000 kilocycles used by a coastal telegraph station when directed to do so by the coastal station to which the frequency is assigned.

(c) On a United States government frequency when directed to do so by a station of the government department to which the frequency is assigned. The ship station operating frequency and the type of emission on this frequency shall be designated by the government station, provided that on frequencies below 160 kilocycles the emission shall be A-1 only.*†

§ 8.92 *Record of frequency adjustments.* In ship stations licensed to operate on frequencies within the band 365 to 515 kilocycles, a written record shall be maintained of the adjustments of the transmitting and receiving equipment for operation on the frequencies 375 and 500 kilocycles and at least one working frequency in this band. This record of adjustments shall be posted at all times in a conspicuous place on or near the particular equipment involved.*†

§ 8.93 *Control of carrier wave in telephony.* When communicating on 2738, 35860 or 37660 kilocycles the transmitter carrier wave of all ship telephone stations, after July 1, 1940, shall be either automatically "voice-controlled" or controlled manually by the person whose speech is being transmitted.*†

§ 8.94 *Shared use of 2738 kilocycles.* In regions²² of heavy radio traffic, any one exchange of communications between any two ship stations, or between

a ship and a coastal station, on the frequency 2738 kilocycles shall not exceed 10 minutes in duration. Subsequent to such exchange of communications, this frequency shall not again be used for communication between the same two stations until 15 minutes have elapsed, provided that this requirement shall in no way limit or delay the transmission of distress or emergency communications.*†

§ 8.95 *Use of frequency 2738 kilocycles.* The frequency 2738 kilocycles shall be used by ship telephone stations primarily for the exchange of communications relating to the safety of navigation and to the ship's business. The exchange of any other communications on this frequency is authorized upon the express condition that interference shall not be caused to the handling of messages relating to the safety of navigation and the ship's business with due regard to the priority of communications designated by Section 8.42.*†

§ 8.96 *Frequency tolerance.* The licensee of each ship station shall maintain the operating frequency within a tolerance of plus or minus the assigned frequency as specified in the following table:

TOLERANCE TABLE

[Not applicable to lifeboat emergency transmitters]

BELOW 30,000 KC

Frequency bands in kilocycles (inclusive)	Tolerances	
	Transmitters first licensed for ship service prior to January 1, 1940, and until January 1, 1944, after which date they shall conform to the tolerances indicated in column 2	New transmitters first licensed for ship service after January 1, 1940
	Column 1	Column 2
	Percent	Percent
1. From 110 to 160 kc.....	0.5	0.3
2. From 365 to 515 kc.....	.5	.3
3. From 1500 to 3500 kc.....	.05	.04
4. From 4090 to 4115 kc.....	.04	.02
5. From 4115 to 4165 kc.....	.1	.05
6. From 4165 to 5500 kc.....	.04	.02
7. From 5500 to 5550 kc.....	.1	.05
8. From 5550 to 5640 kc.....	.04	.02
9. From 6000 to 30000 kc.....		
Ship stations when using frequencies other than those within the bands specified below.....	.04	.02
Ship stations when using frequencies within the following bands:		
6200 to 6250 kc.....	.1	.05
8230 to 8330 kc.....	.1	.05
11000 to 11100 kc.....	.1	.05
12340 to 12500 kc.....	.1	.05
16460 to 16660 kc.....	.1	.05
22000 to 22200 kc.....	.1	.05
10. 355 kc.....	.5	.1

The frequency tolerance for lifeboat emergency transmitters licensed to operate in the band 365 to 515 kilocycles shall be 0.5 percent as determined during performance or maintenance tests of such transmitters.

ABOVE 30,000 KC

Frequency Bands in Kilocycles	Tolerances
1. From 30,000 to 40,000 kc: Ship stations when using frequencies other than 35,860 and 37,660 kc.....	Percent 0.03
Ship stations when using 35,860 and 37,660 kc.....	.04
2. From 100,000 to 200,000 kc.....	.05

*†

§ 8.97 *Frequency measurement.*²³ The licensee of each ship station shall provide for measurement of each operating frequency of the station and shall establish a procedure for regular measurement of these frequencies. These measurements shall be made by means independent of the frequency control of the ship station transmitter and shall be of an accuracy sufficient to detect deviations from the assigned frequency within one-half the authorized tolerance.*†

RADIO INSTALLATION

§ 8.111 *Approval of installation and electrical wiring.* All ship radio station installations, including the electrical wiring interconnecting all components thereof, shall comply with all applicable rules and regulations of the Commission and with the Standards of Good Engineering Practice for Ship Stations promulgated by the Commission.*†

§ 8.112 *Installation on board cargo vessels.* Whenever a main installation only is provided on board a cargo vessel in accordance with the terms of Section 354 (a) of the Communications Act, this installation shall comply in full with all rules and regulations of the Commission that apply to emergency or reserve installations on board vessels subject to Title III, Part II of said Act.*†

§ 8.113 *Separate main and emergency installations.* A radio installation on board a vessel subject to Title III, Part II of the Communications Act, to be construed as a main installation and a separate emergency or reserve installation, shall comply with the following conditions, in addition to all other requirements:

(a) A main transmitter and an associated main receiver shall be installed.

²² Par. 6 (3), Art. 9, of the General Radio Regulations of Cairo, 1938, provides that all ship stations transmitting on frequencies in the band 100 to 160 kilocycles and on frequencies above 4,000 kilocycles must be equipped with a wavemeter (frequency meter) having a precision at least equal to .005 (0.5%) when the transmitter itself is incapable of being adjusted with this precision or better. For this purpose, the Commission will accept a master-oscillator of a ship station electron tube transmitter in lieu of the frequency meter prescribed by this international regulation, provided the calibration of the said transmitter and of the circuit as a whole is such as to permit the convenient adjustment of the transmitter to its licensed frequencies within the tolerance for ship stations specified by Section 8.96.

²³ For the purpose of this section, a region of heavy radio traffic is any geographical area in which a plurality of ship telephone stations licensed to use the frequency 2738 kilocycles are located within interference range of each other.

(b) A separate emergency transmitter and an associated separate emergency receiver shall be installed.

(c) Emergency electric lights shall be installed.

(d) An emergency power supply shall be installed.*†

§ 8.114 *Requirements of main installation.* All main installations on board vessels subject to Title III, Part II of the Communications Act shall comply with the following conditions, in addition to all other requirements:

(a) The main transmitter shall be capable of transmitting by means of A-2 emission (or type B emission until January 1, 1940) on the distress frequency 500 kilocycles, the direction-finding frequency 375 kilocycles, and at least one working frequency within the band 365 to 485 kilocycles, shall be capable of rapidly changing from any one of the frequencies to any one of the others, and shall have a frequency of modulation in accordance with the requirements of Sections 8.142 and 8.143. A main transmitter, to be approved as complying with the transmitting range, prescribed by Section 354 (d) of the Communications Act, shall comply with all requirements for approved main transmitters contained in Sections 8.142 and 8.143.

(b) The main receiver shall be capable of receiving radiotelegraph signals, types A-1, A-2 and B emission, on all frequencies within the bands 100 to 200 kilocycles and 350 to 515 kilocycles.

(c) Sufficient electrical power and the normal voltage(s) required for efficient operation of the main installation at maximum required²⁷ power, and for simultaneously charging at the required rate all storage batteries used for the emergency installation, direction finder (when a direction finder is required), and auto alarm (when an alarm is required), shall be available, independent of the emergency power supply, at all times when the vessel is being navigated outside a harbor or port and when required during inspection of the ship radio station by an authorized representative of the Commission. Under these conditions, the power-supply line-voltage drop at the radio room terminals shall not exceed ten percent between the no-load and full-load²⁸ conditions. In all installations on new ships completed after July 1, 1940, this voltage drop shall not exceed five percent under the same conditions.*†

§ 8.115 *Requirements of emergency or reserve installation.* All emergency or

reserve installations on board vessels subject to Title III, Part II of the Communications Act shall comply with the following conditions, in addition to all other requirements:

(a) The emergency installation shall be capable of being placed into operation within a maximum time of one minute after the need arises for its use.²⁹

(b) The emergency transmitter shall be capable of transmitting by means of A-2 emission (or type B emission until January 1, 1940), on the distress frequency 500 kilocycles, the direction-finding frequency 375 kilocycles, and at least one working frequency within the band 365 to 485 kilocycles, shall be capable of rapidly changing from any one of the frequencies to any one of the others, and shall have a frequency of modulation in accordance with the requirements of Section 8.144. An emergency transmitter, to be approved as complying with the transmitting range prescribed by Section 354 (f) of the Communications Act, shall comply with all requirements for approved emergency transmitters contained in Section 8.144.

(c) The emergency receiver shall be capable of receiving radiotelegraph signals, types A-1, A-2 and B emission, on all frequencies within the band 350 to 515 kilocycles.

(d) The emergency power supply shall be maintained in readiness to operate effectively and shall have a reserve capacity of at least six continuous hours at all times while the vessel is navigated outside a harbor or port and whenever the vessel leaves or attempts to leave a harbor or port of the United States for a voyage in the open sea.

(e) The shipowner, operating company, or station licensee, if directed by the Commission or its authorized representative, shall prove by such demonstration³⁰ as may be deemed necessary, that the emergency installation satisfies the six-hour operating requirement of law.

(f) All emergency power-supply circuits shall be appropriately fused to afford adequate protection from serious overloads or short-circuits, in accordance with the Standards of Good Engineering Practice for Ship Stations promulgated by the Commission.

(g) Electrical load circuit(s) of any description, except those of the emergency radio³¹ installation, shall not be connected directly or indirectly to the emergency power supply.

(h) The emergency power supply shall be located as near to the emergency transmitter and receiver as is practicable: *Provided, however,* That the location of such power supply complies with re-

lated rules and regulations of the Bureau of Marine Inspection and Navigation of the U. S. Department of Commerce.

(i) The cooling system of all internal-combustion engines used as part of the emergency power supply shall be adequately protected or treated to prevent freezing or overheating consistent with the season and route to be traveled by the particular vessel involved.

(j) There shall be provided emergency electric lights of not less than ten watts per unit, capable of being energized by the radio installation emergency power supply and connected thereto through individual fuses. These electric lights shall be capable of operation independent of any other electrical system and shall be arranged so as to provide satisfactory illumination of the main and emergency radio operating controls, radio station clock, rotating machinery, and terminal of the communication system to the bridge. The emergency lighting electrical circuits shall be arranged so as to avoid the application of excessive voltage to the emergency lights during the charging of the emergency batteries. The terms of this Section or of Section 8.10 shall not preclude the use of any other power supply for energizing these lights solely as an additional provision.*†

§ 8.116 *Use of emergency power supply on board a cargo ship.* The emergency power supply on board a cargo vessel (on which a separate³² main and emergency installation is not provided), subject to Title III, Part II of the Communications Act, while being navigated in the open sea, is authorized to be used only for emergency communication³³ except that it may be used for routine communication for a period not to exceed one hour per day in the aggregate. However, a storage battery which is the emergency power supply or a part thereof, may be used at any time to maintain a watch for safety purposes if such use will not reduce the ability of the emergency power supply to energize the emergency installation for a period of at least six consecutive hours.*†

§ 8.117 *Use of emergency installation on board a passenger ship.* The emergency installation on board a passenger vessel subject to Title III, Part II of the Communications Act, while being navigated in the open sea, is authorized to be used only for emergency communication³⁴ except that it may be used for routine communication for a period not to exceed one hour per day in the aggregate. However, the emergency receiver and its emergency power supply (if such power supply is a storage battery) may be used at any time to maintain a watch for safety purposes, if such use will not reduce the ability of the emergency power supply to energize the emergency in-

²⁷ In the case of the main transmitter, the power specified in Section 8.142, or Section 8.143, whichever Section is applicable.

²⁸ Full load means the sum of all electrical loads ordinarily energized by the involved source of power for regular shipboard purposes, when the vessel is being navigated at sea.

²⁹ Emergency installations in existence which do not meet this requirement must be placed in compliance with this regulation not later than July 1, 1940.

³⁰ See Sections 8.119, 8.120 and 8.121.

³¹ The emergency radio installation includes the required radio station emergency lights.

³² See Section 8.112.

³³ See Section 8.24.

³⁴ See Section 8.24.

stallation for a period of at least six consecutive hours. The provisions of this Section shall apply also to a cargo vessel on which a separate²⁰ main and emergency installation is provided.*†

§ 8.118 *Tests of emergency installation.* On vessels required by law to be equipped with an emergency or reserve installation, the condition of this installation shall be determined by test and actual operation prior to the vessel's departure from each port²⁰ (but not necessarily more than once each day) and on each day the vessel is outside a harbor or port. When storage batteries are used as an emergency power supply or are used for the purpose of starting an emergency engine-driven generator, tests shall be made of the charging circuits for polarity and correct charging rate. Hydrometer readings of the electrolyte of a pilot cell and such other cells as are necessary to determine the state of charge of an emergency lead-acid storage battery, shall be taken. When an engine-driven generator is used as an emergency power supply, a check shall be made of the quantity of fuel in the supply tank.*†

§ 8.119 *Proof of fuel capacity, emergency engine-driven generator.* When the emergency power supply, on board a vessel required by law to be equipped with a radio installation, consists of or includes an engine-driven generator using any form of liquid for fuel, proof of the adequacy of the fuel supply to operate the engine-driven generator continuously and effectively over a prescribed period of time may be established by using as a basis the fuel consumption during a continuous period of one hour when supplying power, at the voltage required for normal and effective operation, to an electrical load as prescribed by Section 8.121.*†

§ 8.120 *Proof of capacity, emergency batteries.* When the emergency power supply, on board a vessel required by law to be equipped with a radio installation, consists of or includes a storage battery, proof of the ability of such battery power supply to operate continuously and effectively over a prescribed period of time is authorized to be established by a discharge test over such prescribed period of time, when supply power at the voltage required for normal and effective operation, to an electrical load as prescribed by Section 8.121.*†

§ 8.121 *Electrical load, emergency installation.* The electrical load-current to be supplied by an emergency power supply for the purpose of establishing proof of required capacity shall be the "total load-current" equal to the "key-up" load-current of the emergency transmitter plus seventy percent of the "variable keying load-current" of this transmitter, together with the emergency receiver and

the emergency lighting load-current. The "key-up" load-current of the emergency transmitter is defined as the power taken from the emergency power supply by this transmitter when the transmitter key is open. The "key-locked" load-current of this transmitter is defined as the current taken from the emergency power supply by this transmitter when the transmitting key is held closed and the transmitter is adjusted to the required²¹ power output. The "variable keying load-current" of this transmitter is defined as the difference between the "key-up" and "key-locked" load-currents. When more than one emergency power supply is employed to energize the various units of the emergency installation, the electrical load-current specified by this Section shall be appropriately divided between the separate emergency power supplies according to the normal arrangement used in the operation of the station.*†

§ 8.122 *Emergency power supply, conclusion of demonstration.* At the conclusion of the tests outlined in Sections 8.119 and 8.120, no part of the emergency source of power shall have an excessive temperature rise, as defined and measured in accordance with Standards of Good Engineering Practice for Ship Stations promulgated by the Commission, nor shall the specific gravity or voltage of the storage battery be below the standard for ninety percent discharge.*†

§ 8.123 *Location and ventilation of source of power.* The exact location and physical arrangement on board a vessel of a storage battery, or engine-driven generator and fuel tank, used as a source of power for any component of a licensed ship radio station, and the method of ventilating the battery or engine compartment, shall be in accordance with rules and regulations of the Bureau of Marine Inspection and Navigation of the U. S. Department of Commerce.*†

§ 8.124 *Specifications and operation of battery and engine-driven generator.* When provided on board any vessel as an inherent part of the radio emergency or reserve installation in compliance with law, a battery or engine-driven generator, from the standpoint of its electrical specifications and operation, shall comply with applicable rules and regulations of the Commission and the Standards of Good Engineering Practice for Ship Stations promulgated by the Commission.*†

§ 8.125 *Type of Engine.* Whenever an engine-driven generator on board any vessel is an inherent part of the radio emergency or reserve installation, required by law for safety purposes, it shall comply, except as provided in Section 8.124, with all applicable rules and regulations of the Bureau of Marine Inspection and Navigation of the U. S. Department of Commerce.*†

²¹ In the case of the emergency transmitter, the power specified in Section 8.144.

§ 8.126 *Routing of electrical power conductors.* The electrical conductors connecting the main radio installation to its normal power supply and the electrical conductors connecting the emergency power supply to the emergency or reserve installation shall be routed so as to afford adequate protection from mechanical injury, shall be adequately protected from overload by fuses, and shall be kept clear of electrical grounds. If, because of the ship's structure, a long indirect routing is necessary, an additional equivalent circuit shall be provided over an alternate route. In all new installations after July 1, 1940, and in all replacement installations after October 1, 1939, these conductors shall be armored.*†

§ 8.127 *Change from transmission to reception.* All ship stations shall be arranged so that change from transmission to reception and vice versa can be made from the normal operating position as rapidly as possible and in all cases within not more than fifteen seconds.*†

§ 8.128 *Crystal rectifier.* Whenever a vessel is subject to the Safety Convention, the radio installation, in addition to all other requirements, shall be provided with a radio receiver capable of receiving radiotelegraph signals, A-2 and B emission, on all frequencies within the band 350 to 515 kilocycles by means of a crystal rectifier, and for this purpose such receiver shall not require the use of electron tube(s). This facility may be included in the main receiver, in the emergency receiver, or an additional receiver having this facility may be provided which shall be located as near to the emergency transmitter as is practicable.*†

§ 8.129 *Percentage of modulation.* Ship telephone stations, licensed to communicate with coastal harbor or coastal telephone stations open to public correspondence, shall be capable of operating at a maximum percentage of modulation of at least seventy-five percent, and in so far as is practicable these stations shall be regularly adjusted for transmission at a maximum percentage of modulation of at least seventy-five percent.*†

REQUIREMENTS FOR APPROVAL OF TRANSMITTERS FOR USE ON BOARD SHIPS SUBJECT TO TITLE III, PART II OF THE COMMUNICATIONS ACT

§ 8.141 *Approved transmitters.* A radiotelegraph transmitter which complies with the requirements specified in Sections 8.142, 8.143 or 8.144, is approved as meeting the relevant requirements of Sections 354 (c), 354 (d), and 354 (f) of the Communications Act, except with regard to the provisions of Section 354 (f) concerning the requirements of an emergency power supply on board ship.*†

§ 8.142 (a) *Requirements for a main transmitter.*

²⁰ See Section 8.113.

²¹ It is recognized that in some cases, tank vessels cannot meet this requirement when in port because of the hazardous nature of the cargo being handled.

Operating radio frequency	Required frequency tolerance	Required type of emission	Minimum permissible modulation percentage	Minimum permissible frequency of modulation	Maximum permissible frequency of modulation	Power required to be developed
500 kc ²¹	Plus or minus 0.3 percent for new transmitters installed beginning January 1, 1940. 0.5 percent for transmitters in service now and until January 1, 1944, after which date they shall conform to plus or minus 0.3 percent.	A-2	70	300 cycles per second.	1250 cycles per second.	At least 200 watts into an average ship station antenna.
Do.....	do.....	A-1				At least 160 watts into an average ship station antenna.
375 kc and one working frequency in the band 365 to 485 kilocycles.	do.....	A-2	70	300 cycles per second.	1250 cycles per second.	At least 140 watts into an average ship station antenna.
Do.....	do.....	A-1				At least 115 watts into an average ship station antenna.

²¹ See footnote 31.

For the purpose of these specifications, the term "average ship station antenna" means an actual antenna installed on board ship having a capacity of 750 micro-microfarads and an effective resistance of four ohms at 500 kc.

(b) A main transmitter will be considered as capable of developing the power and percentage of modulation specified in paragraph (a) of this section if it is demonstrated to the satisfaction of the Commission that the transmitter involved, or a transmitter of the same identical type, will deliver into an artificial antenna having a capacity of 750 micro-microfarads and an effective resistance of 4 ohms at 500 kilocycles, at least 160 watts of A-1 emission, and at least 200 watts of A-2 emission modulated at least 70 percent, at 500 kilocycles; and at least 115 watts of A-1 emission, and at least 140 watts of A-2 emission modulated at least 70 percent, at 375 kilocycles and the one required

working frequency; provided, however, that if deemed necessary this test may be applied to an individual main transmitter installed on board a ship before initial or continued approval thereof. For the performance of this test, amplitude modulation shall be employed and the power in the antenna shall be determined by the I'R (direct) method.

(c) In addition to the foregoing specifications, a main transmitter shall be provided with an arrangement for conveniently reducing the power supplied to the antenna circuit to approximately one-half of the rated power.*†

§ 8.143 (a) *Requirements applicable only to a main transmitter in existence prior to February 1, 1938.*

Operating radio frequency	Required frequency tolerance	Required type of emission	Minimum permissible modulation percentage	Minimum permissible frequency of modulation	Maximum permissible frequency of modulation	Power required to be developed
500 kc ²¹	Plus or minus 0.3 percent for new transmitters installed beginning January 1, 1940. 0.5 percent for transmitters in service now and until January 1, 1944, after which date they shall conform to plus or minus 0.3 percent.	A-2	50	300 cycles per second.	1,650 cycles per second.	At least 200 watts into an average ship station antenna circuit or at least 400 watts into the plate circuit of the oscillator or amplifier supplying power to the antenna circuit.
375 kc and one working frequency in the band 365 to 485 kilocycles.	do.....	²² A-2	50	do.....	do.....	At least 140 watts into an average ship station antenna circuit or at least 280 watts into the plate circuit of the oscillator or amplifier supplying power to the antenna circuit.

²¹ See footnote 31.

²² See footnote 32.

(b) For the purpose of measuring the power developed by a main transmitter in existence prior to February 1, 1938, as specified in paragraph (a) of this Section, there may be substituted for an average ship station antenna, an artificial antenna having a capacity of 750 micro-microfarads and an effective resistance of 4 ohms at 500 kilocycles. A transmitter in this classification will be considered as capable of developing the above specified power and percentage of modulation if it is demonstrated to the satisfaction of the Commission that the transmitter involved, or a transmitter of the same identical type, will develop the specified power on the frequencies designated, with the required percentage of amplitude modulation for A-2 emission, when properly coupled either to an average ship station antenna or to an artificial antenna having the values of capacity and resistance herein designated. Power supplied to the antenna circuit shall be measured by the I'R (direct) method. If deemed necessary, this test may be applied to an individual main transmitter installed on board a ship before initial or continued approval thereof.

(c) A main transmitter which is installed on board a vessel prior to the effective date of this rule which is not capable of developing the power specified in paragraph (a) of this Section, but which will develop at least 50 watts power of A-2 emission, into the average ship station antenna circuit or at least 100 watts power into the plate circuit of the oscillator or amplifier supplying power to the antenna circuit, is approved for use in compliance with Section 354 (d) of the Communications Act until a date to be fixed by subsequent order of the Commission: *Provided, however,* That where two or more electron-tube transmitters are a part of the radio installation on board a cargo vessel, one or more of these shall not be removed for the primary purpose of operating the remaining transmitter(s) under the provisions of this paragraph.*†

§ 8.144 (a) *Requirements for an emergency transmitter.* The following requirements must be met when the emergency transmitter is energized by a power supply equivalent to the emergency power supply which is or will be available on board the type and class of vessel on which the transmitter is or will be installed and operated.

Operating radio frequency	Required frequency tolerance	Required type of emission	Minimum permissible modulation percentage	Minimum permissible frequency of modulation	Maximum permissible frequency of modulation	Power required to be developed
500 kc ²¹	Plus or minus 0.3 percent for new transmitters installed beginning Jan. 1, 1940. 0.5 percent for transmitters in service now and until Jan. 1, 1944, after which date they shall conform to plus or minus 0.3 percent.	A-2	50 for transmitters in existence prior to Feb. 1, 1938. 70 for other transmitters.	300 cycles per second for transmitters in existence prior to Feb. 1, 1938. 300 cycles per second for other transmitters.	1650 cycles per second for transmitters in existence prior to Feb. 1, 1938. 1250 cycles per second for other transmitters.	At least 50 watts into an average ship station antenna circuit or at least 100 watts into the plate circuit of the oscillator or amplifier supplying power to the antenna circuit.
375 kc and one working frequency in the band 365 to 485 kilocycles.	do	²² A-2	do	do	do	At least 50 watts into an average ship station antenna circuit or at least 60 watts into the plate circuit of the oscillator or amplifier supplying power to the antenna circuit.

²¹ This frequency tolerance formerly was plus or minus 0.5 percent; the new tolerance of plus or minus 0.3 percent is in conformity with the requirements for new transmitters after January 1, 1940, established by the General Radio Regulations of Cairo, 1938.

²² The use of a transmitter producing type B emission is prohibited after Dec. 31, 1939, by Section 8.71, except in case of distress.

An emergency transmitter will be considered as capable of developing the power herein specified if the actual power developed is demonstrated by the same method as expressly set forth in Section 8.143, paragraph (b); provided, however, that if deemed necessary, this test may be applied to an individual emergency transmitter installed on board a ship before initial or continued approval thereof.*†

§ 8.145 *Name plate on transmitters.* Each transmitter which was not in existence prior to February 1, 1938, but which is installed after that date on board a vessel in order to comply with the provisions of Sections 8.142, 8.143 and 8.144, shall be furnished with a durable name plate with the month and year of its completion permanently inscribed thereon.*†

§ 8.146 *Use of additional frequencies.* Nothing in the requirements of Sections 8.141 to 8.144, inclusive, for transmitters shall prevent the use of any additional frequencies or any additional type of emission, by a ship station, in accordance with the terms of its outstanding license(s) granted by the Commission.*†

§ 8.147 *Waiver on small passenger vessels.* The Commission, in an exceptional case, for a passenger vessel of less than 600 gross tons, may waive those parts of the provisions of Sections 8.142 and 8.143 hereof relating to the minimum acceptable power of main transmitters, if a satisfactory showing is made that an installation of the specified minimum power is highly impracticable.*†

§ 8.148 *Type approval.* Approval of a transmitter under the provisions of Sections 8.141 to 8.144, inclusive, is extended to all transmitters of the same identical type, design and construction, and manufactured by the same person.*†

AUTO ALARM

§ 8.161 *Approval by Commission.* An automatic alarm receiver approved by

the Commission as complying with all provisions of its "Auto Alarm Requirements and Type Tests" promulgated²³ under date of October 1, 1935, is approved in accordance with Section 3 (x) of the Communications Act and when so approved shall be considered as complying with all relevant provisions of the International Radio Regulations in force.*†

§ 8.162 *Type approval.*²⁴ Approval of an automatic alarm receiver under the provisions of Section 8.161 is extended to all automatic alarm receivers of the same identical type, design, and construction, manufactured by the same person.*†

§ 8.163 *Auto alarm installation.* A vessel shall be considered as fitted with an auto alarm in accordance with the requirements of Title III, Part II of the Communications Act and the radio provisions of the Safety Convention when the auto alarm installation aboard such vessel complies with the following conditions:

(a) The auto alarm shall be located in the main radiotelegraph operating room and shall be installed in accordance with the Standards of Good Engineering Practice for Ship Stations promulgated by the Commission.

(b) Approved apparatus shall be provided for giving an audible warning in the main radiotelegraph operating room, in the radio operator's cabin; and on the navigating bridge. This apparatus shall operate continuously after the auto alarm has been actuated by an alarm signal or by failure of the auto-alarm system, until manually stopped. Only one switch for stopping the audible warning apparatus from functioning is

²³ Commission mimeograph publication No. 14247.

²⁴ See Telegraph Orders No. 28 and 28-A of the Commission, dated March 10, 1937 and August 6, 1937, respectively.

authorized and this shall be located in the main radiotelegraph operating room and shall be capable of manual operation only.

(c) Failure of the auto alarm to function normally because of prolonged atmospheric (static) or other prolonged interference, or both, shall operate a visual indicator on the bridge. The type and method of installation of such visual indicator shall comply with requirements of the Bureau of Marine Inspection and Navigation of the U. S. Department of Commerce.

(d) There shall be furnished at least two sets of written instructions for the guidance of the ship station radio operator and ship's officers relative to the auto alarm, which shall include:

(1) A general technical description of the auto alarm, including a circuit diagram of the auto-alarm receiver and a wiring diagram of its complete installation on shipboard.

(2) A general explanation of its principles of operation.

(3) A list of faults which may be indicated by the sounding of the audible alarm.

(4) Explanation of how to correct faults, remove and replace defective parts and perform limited repairs at sea.

(5) Explanation of how to test the alarm and adjust the sensitivity control to the "optimum" setting, which shall be summarized upon a card and permanently attached to the front of the alarm in a conspicuous position.

(6) Explanation of the effect of various sensitivity control settings upon the operation of the alarm, which shall be summarized upon a card and permanently attached to the front of the alarm in a conspicuous position.

(7) Description of procedure to be followed with respect to operator making adjustments when alarm bell sounds and also in making log entries.

(e) The testing device of the auto alarm shall be adjusted to produce a test signal of the correct value. This adjustment shall be considered satisfactory when it becomes necessary to turn the sensitivity control from its position of lowest sensitivity (zero dial position) to its position of approximately one-third maximum sensitivity before the alarm can be actuated.*†

§ 8.164 *Serial number.* Each auto alarm of a type approved by the Commission when first installed aboard a vessel of the United States, must bear an identifying serial number. Two or more principal components of one complete installation shall bear the same number. After the initial installation, if any principal component is entirely replaced, the substitute unit shall bear the serial number of the initial unit but must be identified in addition as a replacement. For this purpose the principal components of the following types of auto alarms approved under the conditions of Telegraph Orders Nos. 28 and

28-A of March 10, 1937, and August 6, 1937, respectively, and by subsequent action of the Commission are designated as follows:

(a) *Radiomarine Corporation of America model AR-8600 auto alarm.* One combined receiver and selector unit, without regard to container; one control and terminal box.

(b) *Mackay Radio and Telegraph Company auto alarms, types 101-A and 101-B, manufactured by Federal Telegraph Company.* One selector unit without regard to container; one receiver unit, without regard to container.*†

§ 8.165 *Notification of installation.* The Commission shall be informed in writing on the prescribed²⁵ form immediately upon completion of each auto-alarm installation on board any vessel of the United States. Each report shall specify the type and serial number of the alarm, the name of the vessel, the date of completion of installation, the call letters and name of licensee of the ship radio station and the name of the owner and operating company of the vessel.*†

§ 8.166 *Daily tests.* While the ship is being navigated outside a harbor or port, the auto alarm shall be tested at least once every 24 hours by means of the testing device supplied as part of the alarm, the timing of the dashes to be made by reference to the second hand of the ship station clock. A statement that the foregoing requirement has been fulfilled must be inserted in the radio station log daily.*†

§ 8.167 *Reports.* Adequate records shall be maintained according to the prescribed²⁶ forms covering operation of the auto alarm. These forms shall be mailed to the Commission²⁷ at Washington, D. C., as soon as possible after the first day of each month, covering the month preceding.*†

INTERIOR COMMUNICATION SYSTEM

§ 8.171 *Necessity for communication system.* An approved interior communication system shall be provided in all cases where the radio room does not adjoin or open onto the navigating bridge structure of the ship, when a means of communication between the bridge and radio room of a vessel is required by law.*†

§ 8.172 *Type of communication system.* The interior communication system between the radio operating room(s) and the bridge of a vessel, and between the direction-finding apparatus and the bridge shall be of a type approved by the Bureau of Marine Inspection and Navigation of the U. S. Department of Commerce.*†

§ 8.173 *Efficiency and termination of communication system.* These systems shall be capable of providing efficient communication independent of any other system on the ship, and the location of the termination of these systems shall be subject to approval by the Commission.*†

§ 8.174 *Communication system between the bridge and other radio operating positions.* When the operating position of the emergency radio installation on board a vessel subject to Title III, Part II of the Communications Act is not located in the compartment normally used for operating the main radio installation, an efficient means of communication, independent of any other communication system of the ship, shall be separately provided between the bridge and each of these radio operating positions.*†

§ 8.175 *Location of direction finder.* Whenever the direction finder-receiver is located on the bridge of a ship or within any compartment adjoining or opening onto the navigating bridge structure of the ship, the direction-finding apparatus shall be considered as being located on the bridge, with respect to Section 354 (g) of the Communications Act.*†

CLOCK

§ 8.181 *Clock for intermediate-frequency ship stations.* Each ship station licensed to operate on frequencies below 515 kilocycles shall be provided with a reliable clock with a second hand, preferably a sweep second hand. This clock shall be securely mounted in such a position that the second dial can be easily and accurately read by the operator from his normal operating position, from the operating position at which he would ordinarily transmit the international auto-alarm signal by hand, and from the operating position in the radio room used in testing the auto alarm (if installed) for response to signals from the testing device.*†

§ 8.182 *Clock aboard compulsorily-equipped vessels.* The clock required by Section 8.181, when installed on board a vessel subject to Title III, Part II of the Communications Act, in addition to the requirements of Section 8.181, shall have a sweep second hand and an hour dial not less than five inches in diameter, and shall be capable of operation for at least eight days on one winding: *Provided, however,* That deviations from these requirements may be authorized by the Commission if such deviation does not adversely affect the reliability of the clock or the ability of the ship radio operator to transmit by hand the international auto-alarm signal when using the clock for timing these signals. A request for approval of any deviation from these requirements must be accompanied by a sample of the proposed clock face.*†

§ 8.183 *Time-reference for other ship stations.* Each ship station licensed for operation on frequencies above 1500 kilocycles only shall, as may be necessary

during operation, have available to the operator a suitable time-piece (preferably equipped with a second hand) of sufficient accuracy and reliability to allow for operation of the station in conformity with the terms of its license, regulations of the Commission, and International Radio Regulations in force. The provisions of this section shall not apply to ship stations licensed to operate on frequencies above 30,000 kilocycles only, pending further development of the use of these frequencies.*†

DIRECTION FINDER

§ 8.191 *Direction finder.* The radio direction-finder apparatus (radio compass), installed on board a passenger vessel of 5,000 gross tons or over, in compliance with the requirements of law, shall be capable of efficiently receiving signals (at least types A-2 and B emissions) on any frequency between 285 and 515 kilocycles, shall be accurately calibrated for the purpose of taking bearings from which the true bearing and direction may be determined, and shall be available for use whenever the vessel is being navigated outside a harbor or port.*†

§ 8.192 *Approval of direction finder.* In addition to the provisions of Section 8.191, the radio direction-finding apparatus, to be approved by the Commission, shall comply²⁸ with the Standards of Good Engineering Practice for Ship Stations promulgated by the Commission and new installations after January 1, 1940, shall be capable of efficiently receiving types A-1, A-2, and B emissions. If in the discretion of the Commission, the direction-finding apparatus requires recalibration at any time as the result of official inspection or pertinent facts coming to the attention of the Commission, approval may be withdrawn pending such recalibration.*†

LIFEBOAT INSTALLATIONS

§ 8.201 *Lifeboat radio stations.* The radio installation on motor lifeboats designated by the Bureau of Marine Inspection and Navigation of the U. S. Department of Commerce as requiring a radio installation shall consist of an emergency installation in efficient operating condition which shall comply with the following requirements:

(a) Frequency of operation of transmitter: 500 kilocycles.

²⁵ For the issuance of an initial certificate and endorsement of station license prior to promulgation of the Standards of Good Engineering Practice for Ship Stations, the Commission will approve temporarily any direction finder in efficient operating condition within the frequency range prescribed in Section 8.191, and properly installed on board at the time of inspection. Satisfactory evidence must be given to the inspector that it complies with Section 8.191. In the case of a new installation which has not been in use, approval of the instrument on board may be given pending calibration or determination, at the first opportunity, of capability of determining true bearings.

²⁵ F.C.C. Form 815, available upon request, should be used for this purpose.

²⁶ See Section 8.221, paragraph (j).

²⁷ F.C.C. Form 819, available upon request, should be used for this purpose.

²⁸ These reports are for the information of the Commission and the specific contents thereof will not be disclosed.

(b) Type of emission of transmitter: A-2.

(c) Frequency tolerance of transmitter: 0.5 percent.

(d) Power of transmitter: Not less than 75 watts plate input power.

(e) Antenna: A single wire inverted L type not less than 20 feet above the water line with a horizontal section of the maximum practicable length.

(f) Receiver: Electron tube type. Continuous frequency range of at least 350 to 550 kilocycles and capable of reception of types A-1, A-2 and B emissions.

(g) The type of power supply shall be:

For the transmitter: a storage battery.
For the receiver: dry cell battery and/or storage battery.

The necessary power for the transmitter and receiver, at voltages other than the battery voltages, may be obtained by the use of a dynamotor or other suitable device approved by the Commission.

(h) The lifeboat radio transmitter shall be fitted with a radio frequency ammeter of suitable range and scale, connected so as to indicate the current in the antenna circuit. Existing lifeboat transmitters not so equipped shall be placed in compliance with this requirement prior to July 1, 1940.*†

§ 8.202 *Availability and use of lifeboat radio power.* The power supply of a lifeboat radio installation shall be capable at all times of operating the entire lifeboat radio installation for a period of at least six continuous hours in accordance with Section 8.115 (d). The storage battery or batteries may be used also to operate equipment other than radio except the electric starter of the lifeboat motor provided the battery capacity is sufficient to not affect adversely its ability to fulfill the foregoing six-hour radio operating requirement. All individual circuits connected to the transmitter storage battery shall be independently and properly fused.*†

§ 8.203 *Details of lifeboat radio installation.* The components and assembly of the entire installation shall primarily insure the utmost dependable operation, the design shall be such that heavy vibration and physical shocks to which a lifeboat is subject will cause no damage. All components shall be so housed and treated as to withstand saline dampness for extended periods without damage and to minimize the adverse effect of prolonged exposure to salt water or salt spray. Storage batteries shall be mounted in cabinets that will provide protection from salt water spray and also allow proper ventilation, subject to approval of the Bureau of Marine Inspection and Navigation of the U. S. Department of Commerce. Provision shall be made to protect the operator from the elements when the lifeboat is afloat in a heavy sea. Provision shall also be made for the expeditious erection of the antenna system under ad-

verse weather and sea conditions. The use of metal masts and stays, unless broken by insulators, or of any structure at electrical ground potential at the mast-heads is not permitted. Antenna lead-in insulators shall be of a type approved by the Commission. Auxiliary equipment and spare parts prescribed for lifeboat radio stations by Section 8.235 shall be retained within the radio-equipped lifeboat at all times while the vessel is in active service.*†

§ 8.204 *Inspection of lifeboat radio installation.* The lifeboat radio installation shall be inspected and tested by a qualified representative of the licensee of the ship radio station within 24 hours prior to departure to sea from each port (except not necessarily more than once each week) and at least once each year with the lifeboat afloat. The results of the inspection and tests shall be made known to the master of the vessel and shall be noted in the ship's radio station log. The annual inspection afloat shall include an actual test of the transmitter and receiver connected to the regular lifeboat antenna (erected) to determine that each is in effective operating condition. When testing with the lifeboat not afloat, the transmitter may be connected to an artificial antenna, in lieu of the regular lifeboat antenna, having electrical characteristics equal to those of the regular lifeboat antenna. To avoid interference transmission tests shall be conducted under the same procedure and regulations as prescribed for testing of the ship's regular radio station transmitting equipment and in particular transmission tests shall not be made during the international silent period.*†

§ 8.205 *Examination of lifeboat radio batteries.* When the vessel is under way, provision shall be made for the adequate charging of storage batteries and the routine inspection of all batteries, without removing them from the lifeboat. Such charging apparatus shall be arranged so as not to interfere with the launching of the lifeboat, and for this purpose shall be easily and quickly removable. Examination of the batteries shall be made at least once every seven days by a qualified radio operator and a statement in regard to their condition and specific gravity in the case of a lead-acid battery, or voltage under normal load in the case of dry or Edison batteries, shall be reported to the master and entered in the ship's radio station log. Dry batteries shall be replaced when it is found that the voltage under load has fallen 15 percent below the rated voltage of the battery.*†

§ 8.206 *Lifeboat radio instructions.* Instructions shall be plainly marked on the apparatus in sufficient detail to inform inexperienced or uninstructed personnel how to place the radio equipment in operation and how to transmit appropriate signals for a period of time sufficient to enable vessels or land stations,

within communication range and equipped with radio direction finders, to determine the position of the lifeboat.*†

§ 8.207 *Demonstration of six hour provision; lifeboats.* The shipowner, operating company, or station licensee, if directed by the Commission or its authorized representative, shall prove by demonstration as may be deemed necessary, that the lifeboat radio station power supply is capable of energizing this station for a period of six continuous hours in accordance with Section 8.120.*†

§ 8.208 *Charging circuit on new vessels.* In all new installations completed after January 1, 1940, the charging circuit, for the lifeboat radio storage battery or batteries, shall be routed through the main radio telegraph operating room. A device which during charge of the lifeboat battery or batteries will give a continuous indication of the polarity and the rate of such charge, shall be connected in this charging circuit and shall be located in the main radiotelegraph operating room for purposes of frequent observation.*†

REGULATION OF WATCH

§ 8.211 *Report to bridge.* On board a cargo vessel of the United States subject to Title III, Part II of the Communications Act which is fitted with an auto alarm, the operator when going off watch, shall report to the officer on watch on the bridge whether or not the auto alarm has been placed in use and adjusted for effective operation.*†

§ 8.212 *Use of auto alarm.* The auto alarm shall be in operation and adjusted for normal efficiency according to prevailing conditions of radio reception at all times while the ship is being navigated outside a harbor or port when the operator is not on watch, and shall not be rendered inoperative when a radio direction finder, on board the same ship, is being used.*†

§ 8.213 *Auxiliary antenna.* On a vessel required by law to maintain a watch by a qualified operator or operators, an effective auxiliary antenna or other approved arrangement shall be provided whenever deemed necessary by the Commission to avoid unauthorized interruption of this watch during use of a radio direction finder on board the same vessel.*†

RADIO LOG

§ 8.221 *Radio log for safety purposes.* Each ship station operating on frequencies within the band 350 to 515 kilocycles, when required by law to keep a watch for safety purposes by means of a qualified operator, shall maintain an accurate radio log as follows:

(a) Each sheet of the log shall be numbered in sequence, for each voyage, and shall include official call letters of the ship station and the name of the operator on watch.

(b) The entry "on watch" shall be made by the operator beginning a watch, followed by his signature. The entry "off watch" shall be made by the operator being relieved or terminating a watch, followed by his signature. All log entries shall be currently completed at the end of each watch by the operator responsible for the entries. The use of initials or signs is not authorized in lieu of the operator's signature.

(c) During the period a watch is maintained by an operator, all calls transmitted to or from the ship station and all replies transmitted or received, shall be entered, stating the time and frequencies, and the call letters⁴⁰ of the station communicated with or heard. In addition a notation of any messages exchanged shall be entered, stating the time, the frequency in kilocycles and the call letters⁴⁰ of the station(s) heard, or communicated with. Insofar as possible, a positive entry with respect to reception on 500 kilocycles (410 kilocycles on the Great Lakes) shall be made at least once in each fifteen minutes. The entries required by paragraph (c) hereof shall be acceptable as positive entries provided operating conditions are such as to prevent additional entries being made.

(d) The time of making an entry shall be shown opposite the entry and shall be expressed in Greenwich mean time (GMT) (counted from 00:00 to 24:00 o'clock, beginning at midnight).⁴¹ The first entry in each hour shall consist of four figures; additional entries in the same hour may be expressed in two figures by omitting the hour designation. The abbreviation "GMT" shall be marked at the head of the column in which the time is entered.

(e) During the period a watch is maintained by an operator, an entry shall be made twice per hour stating whether or not the international silent period was observed. In addition, entries shall be made indicating any signals or communications heard on 500 kilocycles (410 kilocycles on the Great Lakes) during this period. If no signals are heard on 500 kilocycles (410 kilocycles on the Great Lakes), an entry to that effect shall be made. The use of rubber stamps for making entries to show observation of the silent period is not authorized.

(f) All distress calls, automatic alarm signals, urgent and safety signals made or intercepted, the complete text, if possible, of distress messages and distress communications, and any incidents or occurrences which may appear to be of importance to safety of life or property at sea, shall be entered, together with the time of such observation or occur-

rence, and the position of the ship or other mobile unit in need of assistance, if it can be determined.

(g) Whenever harmful interference is experienced, an entry shall be made to that effect, stating the source of the interference, if known.

(h) The approximate geographical location of the ship, preferably the noon position, shall be entered each day of each voyage, either in terms of latitude and longitude, or as the distance in nautical miles and the direction from a known fixed point. For this purpose, the master of the ship shall furnish this information to the radio operator. The position report so furnished shall correspond to any entry of the same position made in other official records of the ship.

(i) An entry shall be made of the time of departure and arrival of the vessel at each port, including in each entry the name of the port.

(j) On a cargo vessel equipped with an auto alarm, the entry "auto alarm on", "sensitivity set at _____",⁴² and the entry "auto alarm off", respectively, shall be made whenever the operator places the auto alarm in and out of operation. Results of the required auto alarm tests shall be entered daily, including the sensitivity-control setting and the minimum number of four-second dashes from the testing device which were necessary to properly operate the alarm.

(k) On a cargo vessel equipped with an auto alarm, an entry shall be made in the radio station log whenever the visual indicator installed on the bridge (to indicate when the alarm becomes inoperative due to prolonged atmospherics or other interference), remains actuated for a continuous period of 5 minutes. A statement shall be included giving particulars as to the time the operator was called to make the necessary repairs or adjustments; any reason for the failure; the names of any parts removed, added, or substituted; repairs effected; and the time the alarm was restored to proper operating condition.

(l) On a cargo vessel equipped with an auto alarm, an entry shall be made in the radio station log whenever the auto alarm becomes inoperative due to causes not indicated by the audible warning or the visual indicator, or whenever the audible warning is actuated. The entry shall include a statement showing the time the operator was called to make any necessary repairs or adjustments; the reason for the audible alarm being actuated or failing to be actuated, any parts removed, added, or substituted; repairs effected; and the time the auto alarm was restored to proper operating condition.

(m) Entries shall be made of the results of tests of the emergency installation including transmitter antenna current, hydrometer readings of lead-acid storage batteries, voltage readings of

other types of batteries, and quantity of fuel available for engine generators.

(n) An entry shall be made each time the emergency power supply is used (when the vessel is in the open sea) to carry on routine communication (other than a watch for safety purposes), stating the approximate period of time of such use.

(o) Results of inspections and tests of lifeboat radio equipment, when installed in compliance with requirements of law, prior to departure of the vessel from a harbor or port and the results of weekly inspections⁴³ of such lifeboat equipment shall be entered.

(p) A daily entry shall be made regarding comparison of the radio station clock with standard time, including an indication of any errors observed and corrections made. For this purpose, authentic radio time signals received from land or fixed stations shall be acceptable as standard time.

(q) Any failure of equipment to operate as required, any failure of power supply, any inability to obtain sufficient power to charge storage batteries or to properly operate the radio installation and any incidents tending to unduly delay communication shall be entered.⁴⁴

§ 8.222 *Radio log during hours of service.* (a) Each ship station, not required by law to keep a watch for safety purposes, but authorized to operate on frequencies within the band 350 to 515 kilocycles, shall maintain an accurate radio log in accordance with paragraphs (a) to (g), inclusive, of Section 8.221, during its hours of service when operating on frequencies within this band. The radio log of such stations shall also contain the entries prescribed by paragraphs (h), (i), and (p) of Section 8.221.

(b) Each ship station authorized to operate on any frequency or frequencies in the band 100 to 160 kilocycles or in any band(s) between 4,000 and 30,000 kilocycles, shall maintain an accurate radio log, with respect to operation on frequencies within these bands, in accordance with paragraphs (a), (b), (d), (f), (g), (h), (i), and (p) of Section 8.221.

(c) Ship stations authorized to operate on any frequency or frequencies in the band 1,500 to 3,500 kilocycles, or in any band above 30,000 kilocycles, are required to maintain an adequate record with respect to operation on frequencies within these bands, only insofar as prescribed by paragraph (f) of Section 8.221, together with the name, call letters and position of the ship station, and the name of the radio operator making the record(s).⁴⁵

§ 8.223 *Disposition of logs.* Ship station logs shall be fully completed at the end of each voyage and before the operator(s) responsible leave(s) the ship. The radio log currently in use shall be kept by the licensed operator(s) of the station and during use shall be located

⁴⁰ If desired, the names of the stations or ships also may be entered.

⁴¹ For example, 7:01 P. M. Eastern Standard Time would be entered as 0001 GMT; 7:30 A. M. Eastern Standard Time would be entered as 1230 GMT; 6:45 P. M. Eastern Standard Time would be entered as 2345 GMT.

⁴² The actual setting of the sensitivity control, at the time the auto alarm is placed in operation, should be designated.

⁴³ See Section 8.204.

in a radio operating room of the vessel. At the conclusion of each voyage terminating at a port of the United States,⁴⁴ the original radio log dating from the last departure of the vessel from a United States port (or a duplicate thereof)⁴⁵ shall be retained under proper custody on board the vessel for a sufficient period of time (not required to be retained for more than 24 hours) to be available for inspection by duly authorized representatives of the Commission. Thereafter, the original log (and the duplicate log, if provided)⁴⁶ may be filed at an established shore office of the ship station licensee, and shall be retained as stipulated by Section 2.54 of Part 2.*†

SPARE PARTS

§ 8.231 *Tools and spare parts in general.* On board all vessels subject to Title III, Part II of the Communications Act, sufficient tools to make any minor adjustments of the main and emergency radio installation shall be provided, together with spare parts and auxiliary equipment sufficient to maintain the installations in efficient working condition. These spare parts and this auxiliary equipment shall be located so as to be readily accessible to the radio operator in an emergency.*†

§ 8.232 *Necessary spare parts.* The following spare parts (for radio equipment, other than auto alarm and radio equipped lifeboats) are considered indispensable for the maintenance of the appropriate installations in efficient working condition aboard vessels subject to Title III, Part II of the Communications Act:

(a) Sufficient wire of good electrical conductivity for the erection of a single-wire antenna of the same configuration and linear dimensions as the main transmitting antenna but not less than 300 feet of such wire; or an assembled single-wire transmitting antenna of the same linear dimensions as the main transmitting antenna.

(b) Two antenna insulators of a type suitable for use with either the main transmitting antenna or with an emergency transmitting antenna. Insulators provided in compliance with paragraph (a) will satisfy this requirement.

(c) One sleeve bearing of each type used by all rotating machinery which is a component part of the radio installation required by law.

(d) One complete set of brushes for each unit of rotating machinery which utilizes brushes.

(e) Renewable fuse-cartridges of each type used in connection with units of the radio installation, in the amount of at

least one-half the number of each size and type in actual use. For each renewable fuse-cartridge in actual use, there shall be available six spare fuse links of appropriate capacity. For each non-renewable fuse in use, there shall be available six spare fuses of the same type and of appropriate capacity.

(f) One spare electric light bulb for each emergency light required by Section 8.126.*†

§ 8.233 *Necessary auxiliary equipment.* The following auxiliary equipment (for radio installation, other than auto alarm and radio equipped lifeboats) is considered indispensable for the maintenance of the appropriate installations in efficient working condition on board vessels subject to Title III, Part II of the Communications Act.

(a) One, one to two-inch screwdriver, with approximately 1/8-inch blade.

(b) One, four to six-inch screwdriver.

(c) One set of assorted end-wrenches or socket-wrenches, or one adjustable end-wrench.

(d) One pair of five to eight-inch side cutting pliers.

(e) One high resistance direct current voltmeter having a resistance of at least one thousand ohms per volt and capable of measuring 2, 6 and 110 volts with an accuracy of at least three percent except that on ships where the normal radio room power supply voltage is higher than 110 to 120 volts D. C., the voltmeter shall be capable of measuring this line voltage and 2 and 6 volts with an accuracy of at least three percent.

(f) One electric flashlight, two-cell or larger, complete with bulb and battery, or one portable emergency electric lamp (protected from mechanical injury) with at least ten feet of flexible cord and means for rapid connection to the emergency source of power. One spare bulb of the type used shall be provided.

(g) One hydrometer for use with lead acid batteries when this type of battery is used.

(h) One gallon of distilled water, or other water suitable for use in storage batteries.

(i) Appropriate spark gap wrenches for spark installations.*

(j) One anode spanner wrench for arc installations.

(k) One quart of alcohol for arc installations.

(l) Instruction book(s) and circuit diagrams, including modifications, covering transmitter(s), receiver(s), and direction finder, if a direction finder is required.*†

§ 8.234 *Additional spare parts for specific equipment.* In addition to the spare parts required by Section 8.232, and the auxiliary equipment required by Section 8.233, spare parts as are specifically des-

ignated in special lists⁴⁷ promulgated by the Commission pursuant to the provisions of Section 356 (a) (2) of the Communications Act shall be provided for transmitters, receivers and direction finders which have been given type approval by the Commission.*†

§ 8.235 *Additional spare parts in general.* Prior to the Commission's approval of a particular type of marine transmitter, receiver, or direction finder, and prior to the issuance of associated specific lists of required spare parts and auxiliary equipment, the following spare parts and auxiliary equipment shall be required in addition to those stipulated in Sections 8.232 and 8.233.

(a) *Tube transmitters (spare parts only).* (1) One radio frequency oscillator tube, one tube for each radio frequency amplifier stage, and, if used to provide A-2 emission, one audio frequency oscillator tube. Two tubes for the radio frequency circuit of transmitters of the self-rectified, simple oscillator type. Two anode power supply rectifier tubes, if used.

(2) One resistor of each type used as a grid leak; one resistor of each type as used in voltage divider of grid blocking keying circuit; one resistor of each type as used in series with keying relay winding. The value of each resistor shall be clearly indicated thereon.

(b) *Spark transmitters (spare parts).* (1) One primary radio-frequency circuit condenser of suitable voltage and current rating, having a capacity equal to that of the maximum individual capacitor installed, for each spark transmitter which is used both as a main and emergency transmitter, when no other emergency transmitter is provided.

(2) One complete set of spark gap gaskets.

(3) Four spark gap compression bolts for individual gap units.

(c) *Arc transmitters (spare parts).*

(1) One arc chamber gasket.

(2) One anode tip.

(3) Four carbons.

(d) *Receivers (spare parts).* (1) One complete set of tubes for the receiver(s).

(2) One pair of head-telephones complete with connecting cord and, if used, a cord terminal plug.

(e) *Direction finders (spare parts).*

(1) One complete set of tubes for the receiver associated with the direction finder, if a direction finder is required.

(f) *Radio equipped lifeboats (auxiliary equipment).* (1) One screwdriver.

(2) One pair of side-cutting pliers.

(g) *Radio equipped lifeboats (spare parts).* (1) At least 35 feet of insulated wire suitable for use as antenna wire.

(2) Two antenna insulators.

⁴⁴ Includes Hawaii, Alaska, Puerto Rico, and the Virgin Islands.

⁴⁵ Duplicate logs are not required by the provisions of this Section, unless the original log is removed prior to opportunity for official inspection as explained.

⁴⁶ Effective only until January 1, 1940.

⁴⁷ Lists of spare parts required for specific types of equipment approved by the Commission are furnished to its Inspectors-in-Charge at principal ports and are available to others upon request.

⁴⁸ Effective only until January 1, 1940.

(3) One artificial-antenna capacitor.
 (4) Two tubes for transmitter, except when transmitter employs a single transmitting tube, in which case one tube is required.

(5) One complete set of tubes for the receiver.

(6) One panel electric light bulb, if used.

(7) Renewable fuse-cartridges of each type used in connection with the units of the lifeboat radio installation, in the amount of at least one-half the number of each size and type in actual use. For each renewable fuse-cartridge in actual use, there shall be available six spare fuse links of appropriate capacity. For each non-renewable fuse in use, there shall be available six spare fuses of the same type and of appropriate capacity. If fuse wire is used, sufficient wire shall be provided to permit six complete fuse replacements.*†

§ 8.236 *Spare parts and auxiliary equipment for auto alarm, if auto alarm is required—Radiomarine Corporation of America, type AR-8600.* (a) Tubes: One type 6H6, one type 6A8, two type 6K7, five type 1611.

(b) Two bridge warning-light bulbs.

(c) One 30 ohm resistor.

(d) One 9-volt dry cell bias battery.

(e) Nine glass-enclosed 6-ampere fuses, six glass-enclosed ½-ampere fuses, six 10-ampere fuse links for cartridge type fuses, two cartridges for 10-ampere fuse links.

(f) One relay contact burnishing tool.

Mackay Radio and Telegraph Company, types 101-A and 101-B. (g) Tubes: For the type 101-A alarm: One type 6D6, one type 89, three type 76.

For the type 101-B alarm: One type 6D6, one type 89, one type 75, and two type 76.

(h) Two bridge-warning light bulbs.

(i) Two commutating brushes, two governor brushes and two brush springs for selector motor.

(j) Six fuses for receiver power supply unit, three cartridges for 6-ampere fuse links, one cartridge for 3-ampere fuse links, nine 6-ampere fuse links for cartridge type fuses, three 3-ampere fuse links for cartridge type fuses.

(k) One 4½ volt dry cell bias battery.

(l) One relay contact burnishing tool.*†

§ 8.237 *Location of spare parts.* (a) Spare parts for the direction-finder receiver as required by Section 8.235, paragraph (e), shall be kept in the compartment housing this receiver.

(b) Spare parts and auxiliary equipment for the radio-equipped lifeboat, as required by Section 8.235, paragraph (g), shall be kept in the lifeboat-cabin housing the radio equipment.

(c) The spare emergency light bulb(s) as required by Section 8.232, paragraph (f) shall be mounted in close proximity to the corresponding emergency light socket(s).

(d) The antenna wire, antenna insulators and distilled water, as required

by Sections 8.232, paragraph (a), paragraph (b), and 8.233, paragraph (b), respectively, may be retained in the radio operating room or elsewhere, provided the antenna material is readily accessible to the radio operator in an emergency.

(e) All other spare parts and auxiliary equipment shall be securely retained in a single space, readily accessible to the radio operator in an emergency, in the main radiotelegraph operating room or if desired, in any associated room adjacent to and connected with the main radiotelegraph operating room by an interconnecting doorway.

(f) The space(s) allocated for the location of spare parts and auxiliary equipment in accordance with paragraph (e) herein shall be used only for this purpose, and such space(s) shall be appropriately and conspicuously marked.

(g) All required spare parts and auxiliary equipment shall be available for observation by authorized representatives of the Commission at the time of inspection of the ship radio installation.*†

INSPECTIONS

§ 8.251 *Station available for inspection.* Pursuant to Section 303 (n) of the Communications Act, the radio installation aboard any ship of U. S. registry, or on board any foreign ship within the territorial jurisdiction of the United States, shall be available for inspection by duly authorized representatives of the Commission at any reasonable time and at such frequent intervals as within the discretion of the Commission will insure compliance with applicable regulations, laws and treaties.*†

§ 8.252 *Application for inspection.* Pursuant to Section 360 (b) of the Communications Act, the vessel owner, vessel operator, ship station licensee, and master of a vessel of U. S. registry, which is subject to the provisions of Title III, Part II of the Communications Act, shall be jointly responsible for the submission of a formal application to the Commission* at least once in each 12-month period for a detailed inspection of the ship radio installation. This application shall be filed at least thirty days prior to the date on which the radio installation of the vessel will be ready for inspection at the location specified in the application. A service representative of the ship station licensee and sufficient personnel to lower and raise the antenna(s) and to launch the radio equipped lifeboat(s) shall be on board at the time inspection of the radio installation is desired.*†

§ 8.253 *Convention certificates.* The vessel owner, vessel operator, ship station licensee, and master of a vessel of United States registry subject to the

* Applications should be filed with the Inspector-in-Charge, Federal Communications Commission, at the Field Division office nearest the desired port of inspection of the vessel. See Appendix A, for detailed instructions.

radio provisions of the Safety Convention¹⁰ shall be jointly responsible for the submission of a formal application to the Commission¹¹ requesting appropriate inspection of the radio installation and certification to the Bureau of Marine Inspection and Navigation of the U. S. Department of Commerce for the issuance of an initial, modification, or renewal Convention certificate, or for the submission of a formal application to the Commission requesting exemption from the radio provisions of the Convention, as follows:

(a) A Safety Certificate for a passenger vessel.

(b) A Safety Radiotelegraphy Certificate for a cargo vessel.

(c) An application for exemption from the radio provisions of the Safety Convention for either a passenger vessel or a cargo vessel.*†

APPENDIX A

The following sections herein are quoted herein from the Communications Act of 1934, as amended, for convenience only.

FROM TITLE I

SEC. 3. Definitions.

FROM TITLE III, PART I

SEC. 301. License for Radio Communication or Transmission of Energy.

SEC. 321. Distress Signals and Communications.

SEC. 322. Intercommunication in Mobile Service.

SEC. 323. Interference between Government and Commercial Stations.

SEC. 324. Use of Minimum Power.

SEC. 325. False Distress Signals.

SEC. 326. Censorship.

TITLE III, PART II

SEC. 351. Ship Radio Installations and Operations.

SEC. 352. Exceptions to Section 351.

SEC. 353. Operators, Watches, Auto Alarm.

SEC. 354. Technical Requirements.

SEC. 355. Lifeboats.

SEC. 356. Approval of Installations.

SEC. 357. Transmission of Information.

SEC. 358. Authority of Master.

SEC. 359. Certificates.

SEC. 360. Inspections.

SEC. 361. Control by Commission.

SEC. 362. Forfeitures.

¹⁰ All passenger and cargo vessels of American registry engaged on international voyages, other than cargo vessels of less than 1,600 gross tons, except vessels navigating solely on the Great Lakes or on any bays, sounds, rivers, or protected waters within the jurisdiction of the United States. An "international voyage" is a voyage from a country to a port outside such country, or conversely; and for this purpose every colony, overseas territory, protectorate, or territory under suzerainty or mandate is regarded as a separate country.

¹¹ Applications for inspection and certification in regard to Safety Certificates and Safety Radiotelegraphy Certificates should be filed with the Inspector-in-Charge, Federal Communications Commission, at the Field Division office nearest the desired port of inspection or port at which the vessel is anchored. Applications for exemption should be submitted direct to the Commission at Washington, D. C. See Appendix A, for detailed instructions for filing applications when a vessel of U. S. registry is in a foreign port.

Sec. 3. *Definitions.* (g) "United States" means the several States and Territories, the District of Columbia, and the possessions of the United States but does not include the Philippine Islands or the Canal Zone.

(k) "Radio station" or "station" means a station equipped to engage in radio communication or radio transmission of energy.

(l) "Mobile station" means a radio-communication station capable of being moved and which ordinarily does move.

(m) "Land station" means a station, other than a mobile station, used for radio communication with mobile stations.

(n) "Mobile service" means the radio-communication service carried on between mobile stations and land stations, and by mobile stations communicating among themselves.

(q) "Amateur station" means a radio station operated by a duly authorized person interested in radio technique solely with a personal aim and without pecuniary interest.

(w) (1) "Ship" or "vessel" includes every description of watercraft or other artificial contrivance, except aircraft, used or capable of being used as a means of transportation on water, whether or not it is actually afloat.

(2) A ship shall be considered a passenger ship if it carries or is licensed or certificated to carry more than twelve passengers.

(3) A cargo ship means any ship not a passenger ship.

(4) A passenger is any person carried on board a ship or vessel except (1) the officers and crew actually employed to man and operate the ship, (2) persons employed to carry on the business of the ship, and (3) persons on board a ship when they are carried, either because of the obligation laid upon the master to carry shipwrecked, distressed, or other persons in like or similar situations or by reason of any circumstance over which neither the master, the owner, nor the charterer (if any) has control.

(x) "Auto alarm" on a foreign ship means an automatic alarm receiver which has been approved by the country to which the ship belongs, provided the United States and the country to which the ship belongs are both parties to the same treaty, convention, or agreement prescribing the requirements for such apparatus. "Auto alarm" on a ship of the United States subject to the provisions of Title III, Part II, of this Act means an automatic alarm receiver complying with law and approved by the Commission. Nothing in this Act or in any other provision of law shall be construed to require the recognition of an auto alarm as complying with Title III, Part II, of this Act, on a foreign ship subject to such part, whose country of origin is not a party to a treaty, convention, or agreement with the United States in regard to such apparatus.

(y) (1) For the purpose of Title III, Part II, a "qualified operator" or "operator" on a foreign ship means a person holding a certificate as such complying with the provisions of the General Radio Regulations annexed to the International Telecommunication Convention in force, or complying with an agreement or treaty between the United States and the country to which the ship belongs.

(2) For the purpose of Title III, Part II, a "qualified operator" or "operator" on a ship of the United States means a person holding a radio operator's license of the proper class, as prescribed and issued by the Commission.

(z) "Harbor" or "port" means any place to which ships may resort for shelter or to load or unload passengers or goods, or to obtain fuel, water, or supplies. This term shall apply to such places whether proclaimed public or not and whether natural or artificial.

(aa) "Safety convention" means the International Convention for the Safety of Life at Sea in force and the regulations referred to therein.

Sec. 301. *License for radio communication or transmission of energy.* * * * No person shall use or operate any apparatus for the transmission of energy or communications or signals by radio * * * upon any vessel or aircraft of the United States;

or (f) upon any other mobile stations within the jurisdiction of the United States, except under and in accordance with this Act and with a license in that behalf granted under the provisions of this Act.

Sec. 321. *Distress signals and communications.* (a) The transmitting set in a radio station on shipboard may be adjusted in such a manner as to produce a maximum of radiation, irrespective of the amount of interference which may thus be caused, when such station is sending radio communications or signals of distress and radio communications relating thereto.

(b) All radio stations, including Government stations and stations on board foreign vessels when within the territorial waters of the United States, shall give absolute priority to radio communications or signals relating to ships in distress; shall cease all sending on frequencies which will interfere with hearing a radio communication or signal of distress, and, except when engaged in answering or aiding the ship in distress, shall refrain from sending any radio communications or signals until there is assurance that no interference will be caused with the radio communications or signals relating thereto, and shall assist the vessel in distress, so far as possible, by complying with its instructions.

Sec. 322. *Intercommunication in mobile service.* Every land station open to general public service between the coast and vessels or aircraft at sea shall, within the scope of its normal operations, be bound to exchange radio communications or signals with any ship or aircraft station at sea; and each station on shipboard or aircraft at sea shall, within the scope of its normal operations, be bound to exchange radio communications or signals with any other station on shipboard or aircraft at sea or with any land station open to general public service between the coast and vessels or aircraft at sea: *Provided,* That such exchange of radio communication shall be without distinction as to radio systems or instruments adopted by each station.

Sec. 323. *Interference between Government and commercial stations.* (a) At all places where Government and private or commercial radio stations on land operate in such close proximity that interference with the work of Government stations cannot be avoided when they are operating simultaneously, such private or commercial stations as do interfere with the transmission or reception of radio communications or signals by the Government stations concerned shall not use their transmitters during the first fifteen minutes of each hour, local standard time.

(b) The Government stations for which the above-mentioned division of time is established shall transmit radio communications or signals only during the first fifteen minutes of each hour, local standard time, except in case of signals or radio communications relating to vessels in distress and vessel requests for information as to course, location, or compass direction.

Sec. 324. *Use of minimum power.* In all circumstances, except in case of radio communications or signals relating to vessels in distress, all radio stations, including those owned and operated by the United States, shall use the minimum amount of power necessary to carry out the communication desired.

Sec. 325. *False distress signals; rebroadcasting; studios of foreign stations.* (a) No person within the jurisdiction of the United States shall knowingly utter or transmit, or cause to be uttered or transmitted, any false or fraudulent signal of distress, or communication relating thereto, nor shall any broadcasting station rebroadcast the program or any part thereof of another broadcasting station without the express authority of the originating station.

(b) No person shall be permitted to locate, use, or maintain a radio broadcast studio or other place or apparatus from which or whereby sound waves are converted into electrical energy, or mechanical or phys-

ical reproduction of sound waves produced, and caused to be transmitted or delivered to a radio station in a foreign country for the purpose of being broadcast from any radio station there having a power output of sufficient intensity and/or being so located geographically that its emissions may be received consistently in the United States, without first obtaining a permit from the Commission upon proper application therefor.

(c) Such application shall contain such information as the Commission may by regulation prescribe, and the granting or refusal thereof shall be subject to the requirements of section 309 hereof with respect to applications for station licenses or renewal or modification thereof, and the license or permission so granted shall be revocable for false statements in the application so required or when the Commission, after hearings, shall find its continuation no longer in the public interest.

Sec. 326. *Censorship; indecent language.* Nothing in this Act shall be understood or construed to give the Commission the power of censorship over the radio communications or signals transmitted by any radio station, and no regulation or condition shall be promulgated or fixed by the Commission which shall interfere with the right of free speech by means of radio communications. No person within the jurisdiction of the United States shall utter any obscene, indecent, or profane language by means of radio communication.

Title III, Part II

Radio Equipment and Radio Operators on Board Ship

Ship Radio Installations and Operations

Sec. 351. (a) Except as provided in section 352 hereof, it shall be unlawful—

(1) For any ship of the United States other than a cargo ship of less than sixteen hundred gross tons, to be navigated in the open sea outside of a harbor or port, or for any ship of the United States or any foreign country, other than a cargo ship of less than sixteen hundred gross tons, to leave or attempt to leave any harbor or port of the United States, for a voyage in the open sea, unless such ship is equipped with an efficient radio installation in operating condition, in charge of and operated by a qualified operator or operators, adequately installed and protected so as to insure proper operation, and so as not to endanger the ship and radio installation, as hereinafter provided, and in the case of a ship of the United States, unless there is on board a valid station license issued in accordance with this Act;

(2) For any passenger ship of the United States of five thousand gross tons, or over, to be navigated outside of a harbor or port, in the open sea, or for any such ship of the United States or any foreign country to leave or attempt to leave any harbor or port of the United States for a voyage in the open sea, unless such ship is equipped with an efficient radio direction finder apparatus (radio compass) properly adjusted in operating condition as hereinafter provided, which apparatus is approved by the Commission;

(b) A ship which is not subject to the provisions of this part at the time of its departure on a voyage shall not become subject to such provisions on account of any deviation from its intended voyage due to stress of weather or any other cause over which neither the master, the owner, nor the charterer (if any) has control.

Sec. 352. (a) The provisions of this part shall not apply to—

(1) A ship of war;
(2) A ship of the United States belonging to and operated by the Government, except a ship of the United States Maritime Commission, the Inland and Coastwise Waterways Service, or the Panama Railroad Company;

(3) A foreign ship belonging to a country which is a party to the Safety Convention

and which ship carries a valid certificate exempting said ship from the radio provisions of that Convention, or which ship conforms to the radio requirements of such Convention or Regulations and has on board a valid certificate to that effect;

(4) Yachts of less than six hundred gross tons not subject to the radio provisions of the Safety Convention;

(5) Vessels in tow;

(6) A vessel navigating solely on the Great Lakes, or on any bays, sounds, rivers, or protected waters within the jurisdiction of the United States, or to a vessel leaving or attempting to leave any harbor or port of the United States for a voyage solely on the Great Lakes, or on any bays, sounds, rivers, or protected waters within the jurisdiction of the United States.

(b) The Commission may, if it considers that the route or the conditions of the voyage or other circumstances are such as to render a radio installation unreasonable or unnecessary for the purpose of this part, exempt¹ from the provisions of this part any ship, or any class of ships, which falls within any of the following descriptions:

(1) Passenger ships which in the course of their voyage do not go more than twenty nautical miles from the nearest land or more than two hundred nautical miles between two consecutive ports;

(2) Cargo ships which in the course of their voyage do not go more than one hundred and fifty nautical miles from the nearest land;

(3) Passenger vessels of less than one hundred gross tons not subject to the radio provisions of the Safety Convention;

(4) Sailing ships.

Operators, Watches, Auto Alarm

SEC. 353. (a) Each cargo ship required by this part to be fitted with a radio installation and which is not fitted with an auto alarm, and each passenger ship required by this part to be fitted with a radio installation, shall, for safety purposes, carry at least two qualified operators.

(b) A cargo ship, required by this part to be fitted with a radio installation, which is fitted with an auto alarm in accordance with this title, shall, for safety purposes, carry at least one qualified operator who shall have had at least six months' previous service in the aggregate as a qualified operator in a station on board a ship or ships of the United States.

¹An application under oath on F. C. C. Form No. 820 may be made direct to the Federal Communications Commission at Washington, D. C., requesting that a particular ship be exempt from the provisions of the Safety of Life at Sea Convention or Title III, Part II, of the Communications Act of 1934 as amended, or both. It should describe the ship, or ships, to which it applies, the nature and extent of the voyage(s) for which exemption is requested, the maximum distance from land the ship is expected to be navigated and should specify in detail the reasons for exemption. Certified copies of the log of a number of voyages made (over periods of time which may be specified by the Commission) by the subject ship over the waters in question should be submitted. In the event any accidents occurred on the route in question, full particulars regarding the facts should be submitted, including a statement of the communication facilities which were available at that time. Whenever the Commission grants exemption for a vessel engaged on an international voyage, the Commission will request the issuance of an exemption certificate to such vessel by the Bureau of Marine Inspection and Navigation of the Department of Commerce. With regard to United States ships not subject to the safety Convention, an appropriate certification will be issued by the Commission. The determination of the Commission with respect to exemptions provided for herein will be final, subject only to the right of review by the courts.

(c) Each ship of the United States required by this part to be fitted with a radio installation shall, while being navigated outside a harbor or port, keep a continuous watch by means of qualified operators: *Provided, however,* That in lieu thereof on a cargo ship fitted with an auto alarm in proper operating condition, a watch of at least eight hours per day, in the aggregate, shall be maintained by means of a qualified operator.

(d) The Commission shall, when it finds it necessary for safety purposes, have authority to prescribe the particular hours of watch on a ship of the United States required by this part to be fitted with a radio installation.

(e) On all ships of the United States fitted with an auto alarm, said apparatus shall be in operation at all times while the ship is being navigated outside of a harbor or port when the operator is not on watch.

Technical Requirements

SEC. 354. The radio installation and the radio direction-finding apparatus required by section 351 of this part shall comply with the following requirements:

(a) The radio installation shall comprise a main and an emergency or reserve installation: *Provided, however,* That on a cargo ship, if the main installation complies also with all the requirements of an emergency or reserve installation, the emergency or reserve installation may be omitted.

(b) The ship's radio operating room and the emergency or reserve installation shall be placed in the upper part of the ship in a position of the greatest possible safety and as high as practicable above the deepest load water line, and the location of such room or rooms shall be approved by the Bureau of Marine Inspection and Navigation, Department of Commerce.

(c) The main and emergency or reserve installations shall be capable of transmitting and receiving on the frequencies and types of waves designated by the Commission pursuant to law for the purpose of distress and safety of navigation.

(d) The main installation shall have a normal transmitting and receiving range of at least two hundred nautical miles, that is to say, it must be capable of transmitting and receiving clearly perceptible signals from ship to ship over a range of at least two hundred nautical miles by day under normal conditions and circumstances.

(e) Sufficient power shall be available at all times to operate the main radio installation efficiently under normal conditions over the range specified in subsection (d) of this section.

(f) The emergency or reserve installation shall include a source of energy independent of the propelling power of the ship and of any other electrical system and shall be capable of being put into operation rapidly and of working for at least six continuous hours. For the emergency or reserve installation, the normal range as defined in subsection (d) of this section shall be at least one hundred nautical miles.

(g) There shall be provided between the bridge of the ship and the radio room, and between the bridge and the location of the direction finding apparatus, when the direction finding apparatus is not located on the bridge, an efficient means of communication independent of any other communication system of the ship.

(h) The direction finding apparatus shall be efficient and capable of receiving clearly perceptible radio signals and of taking bearings from which the true bearing and direction may be determined. It shall be capable of receiving signals on the frequencies prescribed for distress, direction finding, and radio beacons by the General Radio Regulations annexed to the International Telecommunication Convention in force and in new installations after the effective date of this part, such other frequencies as the Commission may for safety purposes designate.

Lifeboats

SEC. 355. Every motor lifeboat, required to be equipped with radio by treaty or convention to which the United States is a party, by statute, or by regulation made in conformity with a treaty, convention, or statute, shall be fitted with an efficient radio installation under such rules and regulations, as the Commission may find necessary to promote the safety of life.

Approval of Installations

SEC. 356. (a) Insofar as is necessary to carry out the purposes and requirements of this part, the Commission shall have authority, for any ship subject to this part—

(1) To approve the details as to the location and manner of installations of the equipment required by this part or of equipment necessitated by reason of the purposes and requirements of this part.

(2) To approve installations, apparatus, and spare parts necessary to comply with the purposes and requirements of this part.

(3) To prescribe such additional equipment as may be determined to be necessary to supplement that specified herein, for the proper functioning of the radio installation installed in accordance with this part or for the proper conduct of radio communication in time of emergency or distress.

Transmission of Information

SEC. 357. (a) The master of every ship of the United States equipped with radio transmitting apparatus, on meeting with dangerous ice, a dangerous derelict, a tropical storm, or any other direct danger to navigation, shall cause to be transmitted all pertinent information relating thereto, to ships in the vicinity and to the appropriate authorities, in accordance with rules and regulations issued by the Commission, which authorities of the United States shall, when they consider it necessary, promptly bring the information received by them to the knowledge of those concerned and foreign authorities interested.

(b) No charge shall be made by any ship or station in the mobile service of the United States for the transmission, receipt, or relay of the information designated in subsection (a) originating on a ship of the United States or of a foreign country.

(c) The transmission by any ship of the United States, made in compliance with subsection (a), to any station which imposes a charge for the reception, relay, or forwarding of the required information, shall be free of cost to the ship concerned and any communication charges incurred by the ship for transmission, relay, or forwarding of the information may be certified to the Commission for reimbursement out of moneys appropriated to the Commission for that purpose.

(d) No charge shall be made by any ship or station in the mobile service of the United States, for the transmission of distress messages and replies thereto in connection with situations involving the safety of life and property at sea.

(e) Notwithstanding any other provision of law, any station or carrier may render free service in connection with situations involving the safety of life and property, including hydrographic reports, weather reports, reports regarding aids to navigation and medical assistance to injured or sick persons on ships and aircraft at sea. All free service permitted by this subsection shall be subject to such rules and regulations as the Commission may prescribe, which rules may limit such free service to the extent which the Commission finds desirable in the public interest.

Authority of Master

SEC. 358. The radio installation, the operators, the regulation of their watches, the transmission and receipt of messages, and the radio service of the ship except as they may be regulated by law or international agreement, or by rules and regulations made in pursuance thereof, shall in the case of a ship of the United States be under the supreme control of the Master.

Certificates*

SEC. 359. (a) Each vessel of the United States to which the safety convention applies shall comply with the radio and communication provisions of said convention at all times while the vessel is in use, in addition to all other requirements of law, and have on board an appropriate certificate as prescribed by the safety convention.

(b) Appropriate certificates concerning the radio particulars provided for in said convention shall be issued to any vessel of the United States which is subject to the radio provisions of the safety convention and is found by the Commission to comply therewith. Such certificates shall be issued by the Department of Commerce, or whatever other agency is authorized by law so to do, upon request of the Commission made after proper inspection or determination of the facts. If the holder of such certificate violates the provisions of the safety convention, or of this Act, or the rules, regulations, or conditions prescribed by the Commission, and if the effective administration of the safety convention or of this part so requires, the Commission, after hearing in accordance with law, is authorized to request the modification or cancellation of such certificate. Upon receipt of such request the Department of Commerce, or whatever other agency is authorized by law to do so, shall modify or cancel the certificate in accord therewith. The Commission is authorized to issue, modify, or cancel such certificates in the event that no other agency is authorized to do so.

SEC. 360. (a) In addition to any other provisions required to be included in a radio station license, the station license of each ship of the United States subject to this title shall include particulars with reference

* Instructions governing procedure when in foreign ports. Ships of the United States subject to the Safety Convention in ports of any of the foreign countries parties to the Safety Convention may expect to be required by local authorities to exhibit a safety certificate, a safety radiotelegraphy certificate, or an exemption certificate relating to radio issued by the Government of the United States. Lacking a certificate, or if the local authorities, upon inspection, find that the ship does not comply with the terms of the certificate or the Safety Convention, the ship will then be subject to the applicable laws of the country concerned.

In the event any ship owner or ship operating agency has a vessel in foreign waters, for which a convention certificate (covering radio) is desired and which cannot be made available to the Commission for inspection, a letter outlining the circumstances should be directed to the Commission. Appropriate instructions will be issued upon receipt thereof. If circumstances will not allow this procedure while the ship is in port of one of the countries parties to the Safety Convention, the master of the ship may apply to a United States Consul in that country to request the appropriate local Government authorities to make the required inspection and issue a safety radiotelegraphy certificate, or, to complete the radio particulars on the safety certificate. The Consul should request that the certificate contain the following clause: "Good only until this vessel reaches a port of the continental United States, but in any event for a period not exceeding five months." Such certificates issued under the authority of the foreign government will be accorded the same force as certificates issued by the United States.

If a ship at the time a Convention certificate expires is not in a port of the United States, the certificate may be extended by applying to a United States Consul but such extension will be granted only for the purpose of allowing the ship to complete its return voyage to its own country. No certificate will be extended for a period in excess of five months.

to the items specifically required by this title.

(b) Every ship of the United States, subject to this part, shall have the equipment and apparatus prescribed therein, inspected at least once each year by the Commission.³ If after such inspection, the Commission is satisfied that all relevant provisions of this Act and the station license have been complied with, that fact shall be certified to on the station license by the Commission. The Commission shall make such additional inspections at frequent intervals as may be necessary to insure compliance with the requirements of this Act.

Control by Commission

SEC. 361. Nothing in this title shall be interpreted as lessening in any degree the control of the Commission over all matters connected with the radio equipment and its operation on shipboard and its decision and determination in regard to the radio requirements, installations, or exemptions from prescribed radio requirements shall be final, subject only to review in accordance with law.

Forfeitures

SEC. 362. The following forfeitures shall apply to this part, in addition to the penalties and forfeitures provided by Title V of this Act:

(a) Any ship that leaves or attempts to leave any harbor or port of the United States in violation of the provisions of this part, or the rules and regulations of the Commission made in pursuance thereof, or any ship of the United States that is navigated outside of any harbor or port in violation of any of the provisions of this part, or the rules and regulations of the Commission made in pursuance thereof, shall forfeit to the United States the sum of \$500, recoverable by way of suit or libel. Each such departure or attempted departure, and in the case of a ship of the United States each day during which such navigation occurs shall constitute a separate offense.

(b) Every willful failure on the part of the master of a ship of the United States

³ Instructions relative to applications for inspection of ship stations. Application forms for inspection may be obtained from any port office of the Commission, or any office of the Bureau of Marine Inspection and Navigation, Department of Commerce, and upon completion should be returned to the office of the inspector in charge of the radio district embracing the port at which it is desired that the inspection be made.

To avoid delays and obviate the necessity for reinspection, the owner should have his radio representative make a preliminary inspection and make such repairs, replacements, additions, and adjustments of the radio installation as may be necessary to insure compliance with these requirements. Failure to comply with this procedure may result in considerable delay ensuing before a ship station license can be endorsed or a recommendation for safety or safety radiotelegraphy certificate can be forwarded by the Commission to the Bureau of Marine Inspection and Navigation. This possibility of delay arises from the fact that the Commission's ship station inspection force is limited and because ship station inspections, as well as inspection of other classes of stations, are planned in accordance with a definite schedule.

On the date determined upon for inspection by the Commission, the owner must have, in addition to his radio representative, at least one radio operator, preferably the chief operator, in attendance. In addition, there must be such members of the crew, or other persons as may be necessary to launch radio-equipped lifeboat(s) and to lower and hoist the ship station antenna. Proper power must be available to operate the equipment.

to enforce or to comply with the provisions of this Act or the rules and regulations of the Commission as to equipment, operators, watches, or radio service shall cause him to forfeit to the United States the sum of \$100.

APPENDIX B

The Ship Acts of July 23, 1912, and June 24, 1910, and section 602 (e) of the Communications Act of 1934, as amended, are quoted herein for convenience only.

Ship Act

An act approved July 23, 1912, amending section 1 of an act entitled "An act to require apparatus and operators for radio communication on certain ocean steamers", approved June 24, 1910:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. That from and after October first, nineteen hundred and twelve, it shall be unlawful for any steamer of the United States or of any foreign country navigating the ocean or the Great Lakes and licensed to carry, or carrying, fifty or more persons, including passengers or crew or both, to leave or attempt to leave any port of the United States unless such steamer shall be equipped with an efficient apparatus for radio communication, in good working order, capable of transmitting and receiving messages over a distance of at least one hundred miles, day or night. An auxiliary power supply, independent of the vessel's main electric power plant, must be provided which will enable the sending set for at least four hours to send messages over a distance of at least one hundred miles, day or night, and efficient communication between the operator in the radio room and the bridge shall be maintained at all times.

The radio equipment must be in charge of two or more persons skilled in the use of such apparatus, one or the other of whom shall be on duty at all times while the vessel is being navigated. Such equipment, operators, the regulation of their watches, and the transmission and receipt of messages, except as may be regulated by law or international agreement, shall be under the control of the master, in the case of a vessel of the United States; and every willful failure on the part of the master to enforce at sea the provisions of this paragraph as to equipment, operators, and watches, shall subject him to a penalty of one hundred dollars.

That the provisions of this section shall not apply to steamers plying between ports, or places, less than two hundred miles apart.

SEC. 2. That this act, so far as it relates to the Great Lakes shall take effect on and after April first, nineteen hundred and thirteen, and so far as it relates to ocean cargo steamers shall take effect on and after July first, nineteen hundred and thirteen: *Provided*, That on cargo steamers, in lieu of the second operator provided for in this act, there may be substituted a member of the crew or other person who shall be duly certified and entered in the ship's log as competent to receive and understand distress calls or other usual calls indicating danger, and to aid in maintaining a constant wireless watch so far as required for the safety of life.

The remaining sections of the act of June 24, 1910, which are unchanged, read as follows:

SEC. 2. That for the purpose of this act apparatus for radio communication shall not be deemed to be efficient unless the company installing it shall contract in writing to exchange, and shall, in fact, exchange, as far as may be physically practicable, to be

determined by the master of the vessel, messages with shore or ship stations using other systems of radio communication.

SEC. 3. That the master or other person being in charge of any such vessel which leaves or attempts to leave any port of the United States in violation of any of the provisions of this act shall, upon conviction, be fined in a sum not more than five thousand dollars, and any such fine shall be a lien upon such vessel, and such vessels may be libeled therefor in any district court of the United States within the jurisdiction of which such vessel shall arrive or depart, and the leaving or attempting to leave each and every port of the United States shall constitute a separate offense.

SEC. 4. That the Secretary of Commerce shall make such regulations as may be necessary to secure the proper execution of this act by collectors of customs and other officers of the government.

Section 602 (c) of the Communications Act

Such part or parts of the Act entitled "An Act to require apparatus and operators for radio communication on certain ocean steamers", approved June 24, 1910, as amended, as relate to the ocean and to steamers navigating thereon, are hereby repealed. In all other respects said Act shall continue in full force and effect. The Commission is requested and directed to make a special study of the radio requirements necessary or desirable for safety purposes for ships navigating the Great Lakes and the inland waters of the United States, and to report its recommendations, and the reasons therefor to the Congress not later than December 31, 1939.

[SEAL] JOHN B. REYNOLDS,
Acting Secretary.

[F. R. Doc. 39-2780; Filed, July 27, 1939;
12:27 p. m.]

PART 8—RULES GOVERNING SHIP SERVICE PRIOR RULES REPEALED

The Commission, on July 12, 1939, repealed the Ship Radiotelegraph Safety Rules of May 21, 1937 (CFR, Secs. 81.001-81.322), effective October 1, 1939. The Commission also repealed the following rules, effective October 1, 1939:

Rule No.:	CFR Sec. No.
281	80.01
282-284 (a) (b) (c)	80.10-80.12
284 (d) (e) (f)	80.40-80.42
285-289	80.20-80.24
289a, 289b, 289c	80.25-80.27
290-291	80.28-80.29
292-296	80.43-80.47
296C	80.48

By the Commission.

[SEAL] JOHN B. REYNOLDS,
Acting Secretary.

[F. R. Doc. 39-2781; Filed, July 27, 1939;
12:27 p. m.]

STANDARDS OF GOOD ENGINEERING PRACTICE FOR SHIP STATIONS

APPROVED JULY 26, 1939; EFFECTIVE
IMMEDIATELY

Introduction

There are presented herein certain Standards of Good Engineering Practice for Ship Stations giving instructions concerning procedure to be followed in complying with certain provisions of the

Ship Radiotelegraph Safety Rules of the Communications Commission. While the Ship Radiotelegraph Safety Rules form the basis of good engineering practice, these Standards may go beyond those rules and set up engineering principles and recommendations for consideration relative to various engineering problems. These Standards have been approved by the Commission and thus are considered as reflecting the opinion of the Commission in all matters involved.

Standards of Good Engineering Practice set forth herein are those deemed necessary for demonstrating compliance with certain provisions of paragraph 12 (c) of the Ship Safety Rules along technical lines not specifically enunciated in the regulations. These Standards are based on the best engineering data available from evidence supplied in formal hearings and surveys conducted in the field by the Commission's personnel. While they provide for some degree of flexibility and set forth the conditions under which they are applicable, it is not expected that material deviation therefrom as to fundamental principles will be recognized unless full information is submitted as to the reasonableness of such departure and the need therefor.

These Standards of Good Engineering Practice may necessarily change as progress is made in the radio art, and accordingly it may be necessary to make revisions from time to time. The Commission will accumulate and analyze engineering data available as to the progress of the art so that these Standards may be kept current with the developments.

Field Intensity Measurements to Demonstrate Compliance With Specifications of Paragraph 12 (c) (3) of the Ship Radiotelegraph Safety Rules

Paragraph 12 (c) of the Ship Radiotelegraph Safety Rules provides that certain minimum field intensities are acceptable by demonstration in lieu of the required minimum power specified in section (2) of that paragraph. In this demonstration it is necessary to determine the effective field intensity on certain frequencies under certain conditions at a distance of one nautical mile from the transmitter under test. The following requirements shall govern the taking and submission of data on the field intensity produced.

1. Prior to the beginning of field intensity measurements the applicant for main transmitting installation approval first shall secure approval by the Commission of:

(a) Technical qualifications of the engineers who are to conduct the measurements.

(b) Instruments and methods to be employed for obtaining the measurements.

(c) Locations, proposed time and approximate duration of measurements; also exact frequencies to be used.

2. Prior to the beginning of field intensity measurements and in accordance with the provision of the preceding section, the following information shall be submitted in duplicate to the Commission, with the original in affidavit form, together with a regular application for special temporary authority¹ to transmit experimentally on designated specific frequencies in the vicinity of 500 kc and 375 kc for the purpose of conducting the involved measurements:

(a) Name, address, and technical qualifications of engineer(s) who is (are) to make the measurements (affidavit(s) on this item to be executed by engineer(s) concerned).

(b) Description of methods to be used for measuring the field intensity.

(c) Manufacturer's name and type number of each calibrated instrument to be used, together with manufacturer's rated accuracy.

(d) The date and by whom each instrument was last calibrated, and the present accuracy of each instrument.

(e) Frequencies to be used, general locations of test, and proposed period of time of experimental transmissions for purpose of measuring field intensity.

(f) Type of transmitter under test and power rating designated by the manufacturer.

(g) Description with sketch and dimensions of particular ship station antenna which is to be utilized with the transmitter in question.

3. Upon approval by the Commission of the information submitted as required by section 2 hereof, the applicant will then be in a position to carry out the necessary tests and measurements and in so doing shall conform to the following procedure:

(a) All test transmissions, of which pertinent measurements are made, shall be over seawater or over waters of any bay, sound, or other comparable tide-waters adjacent to the open sea.

(b) The points at which the field intensity is measured shall be from 1 to 4 wavelengths distant from the transmitting antenna.

(c) Transmissions shall be made only on the frequencies authorized and shall not interfere with the normal operation of stations in the maritime mobile service.

(d) Measurements of field intensity on frequencies in the vicinity of 375 and 500 kc shall be made at points located on two radials (one approximately parallel to and the other approximately normal to the flat top of the antenna of the ship station under test). The field intensities (E, expressed in millivolts per meter) are to be multiplied by the corresponding distances from the antenna to the measuring points (d, expressed in nautical miles) and the resulting values (of E. d)

¹ See Part 5, Sec. 5.33 of the Rules and Regulations of the Commission.

along each radial, if more than one is taken on any one radial, shall be averaged to obtain the field intensity at one nautical mile along each radial. If the resulting average values (of E. d) for the two radials chosen differ by more than 10% of the greater value, then measurements are required to be taken along at least four radials from the ship station separated by angles of approximately 45° azimuth. The effective field intensity at one nautical mile is then the root mean square of the average values (of E. d) obtained along the several radials chosen.

(e) A qualified radio engineer shall be in charge of the adjustment of the transmitter under test prior to the field intensity measurements. Preliminary tests shall be made on the frequencies to be used during the field intensity measurements and the following data recorded for each frequency used: (1) Plate power input to the last radio frequency stage; (2) the antenna current (the antenna current ammeter used having been checked or re-calibrated for accuracy to within plus or minus 2% at full scale reading); and (3) the antenna resistance. This engineer or a licensed radio operator holding the proper class of license for operation of the ship station under test shall observe the operation of the transmitter during the field intensity measurements, recording the values (1) and (2) above, for each measurement. If these values are observed and recorded by a licensed radio operator, they shall be certified under oath by him. The provisions of this subsection in no way relieves the operator in charge of the ship station from his responsibility for the proper operation of the equipment, as set forth in the Rules Governing Commercial Radio Operators.

(f) Certification under oath must be obtained from the master of the involved vessel, showing the ship's bearing each time readings of field intensity were taken, and the approximate position of the vessel with respect to a fixed navigational marker or expressed in latitude and longitude.

(g) If possible, the field intensity shall also be measured on the second and third harmonic radio frequencies under the same conditions as when measuring the field intensity on the fundamental frequencies, and the results obtained shall be included in the tabulated data. The Commission may require these additional measurements prior to consideration of approval.

4. Upon completion of the demonstration, the following data shall be submitted in duplicate, with the original in affidavit form, to the Commission for its consideration:

(a) Complete data taken for field intensity measurement, including a chart showing the location of the involved vessel, and each point of measurement numbered to agree with the tabulated data.

(b) Description of methods used to take readings for field intensity, with reference to section 2 (b) hereof.

(c) Manufacturer's name and type number of each calibrated instrument used, together with a statement that such instruments are the same as those described in conformity with section 2 (c) hereof.

(d) Name of each engineer who participated in making the measurements, with reference to section 2 (a) hereof.

(e) A statement, under oath, from the master of the involved vessel, showing the bearing of the vessel each time readings of field intensity were taken and the approximate position of the vessel with respect to a fixed navigational marker or expressed in latitude and longitude.

(f) Tabulated data observed and recorded by a qualified engineer during the preliminary tests made in conformity with section 3 hereof.

(g) Tabulated data observed and recorded by a qualified engineer or a licensed radio operator of the proper grade, on board the vessel during the field intensity measurement tests and certified under oath by the operator in the event that no engineer is in charge on board the vessel during the field intensity tests.

The decision of the Commission with respect to consideration of individual main transmitting installations under this procedure will be based upon the data submitted as set forth in the preceding section 4, and in addition upon the report of its own representative(s) who may be assigned to witness the demonstration.

[SEAL] JOHN B. REYNOLDS,
Acting Secretary.

[F. R. Doc. 39-2799; Filed, July 28, 1939;
12:49 p. m.]

SHIP RADIOTELEGRAPH SAFETY RULES AMENDED

The Commission, on July 26, 1939, effective immediately, amended subparagraph (3), as modified, of paragraph 12 (c) of the Ship Radiotelegraph Safety Rules of May 21, 1937, to read:

(3) A radiotelegraph transmitter, installed aboard a subject vessel prior to July 26, 1939, which complies with each specification for a main transmitter designated in paragraph 12 (c) (2) hereof except "power required to be developed" but which meet the "power required to be developed" provisions contained in paragraph 12 (c) (4) hereof, is approved as a temporary main transmitter for use in compliance with paragraph 12 (b) until not later than January 1, 1940.

An electron-tube transmitter installed aboard a subject vessel and authorized by the radio station license of that vessel prior to July 26, 1939, which will comply with each specification for a

main transmitter designated in paragraph 12 (c) (2) hereof, except the "power required to be developed," will be approved as meeting the requirements of paragraph (b) provided it is further demonstrated, prior to January 1, 1940 and at any time thereafter as may be deemed necessary by the Commission, to the satisfaction of the Commission that, when normally installed and operated aboard the particular vessel in connection with the permanent transmitting antenna of the same vessel, the involved transmitter will produce the following prescribed field intensities at a distance of one nautical mile over a sea-water path(s):

Operating Radio Frequency—Field intensity required at a distance of one nautical mile over a sea-water path.

500* kilocycles—at least 20.0 millivolts per meter.

375* kilocycles—at least 10.0 millivolts per meter.

By the Commission.
[SEAL] JOHN B. REYNOLDS,
Acting Secretary.

[F. R. Doc. 39-2800; Filed, July 28, 1939;
12:49 p. m.]

Notices

DEPARTMENT OF LABOR.

Wage and Hour Division.

NOTICE OF CHANGE IN DATE OF HEARING ON PETITIONS FOR REVIEW OF FINDINGS AND DETERMINATION BY THE PRESIDING OFFICER ON APPLICATIONS FOR PERMISSION TO EMPLOY LEARNERS IN THE APPAREL INDUSTRY

Notice is hereby given that, pursuant to the requests of interested parties, the public hearing on Petitions for Review of Findings and Determination by the Presiding Officer on Applications for Permission to Employ Learners in the Apparel Industry, originally scheduled for July 18, 1939 (4 F.R. 2743 DI), subsequently postponed to July 31, 1939 (4 F.R. 3310 DI), is hereby postponed until ten o'clock on September 12, 1939, at the Raleigh Hotel, 12th and Pennsylvania Avenue Northwest, Washington, D. C.

Notice is also given that this hearing will be held for the purpose of taking such testimony and hearing such argument as may be relevant to the determination of the following questions not only while the minimum hourly

* The Commission, in each case and upon proper application, may authorize a different frequency as close to these frequencies as possible, to be used for purposes of this demonstration, in order to minimize interference. In such instances, the field intensities required to be developed may be changed in appropriate proportion to the frequency to be used, in accordance with the best available engineering data. (Sec. 354, 50 Stat. 193; 47 U.S.C. 354)

wage rate is twenty-five cents, but also at the minimum hourly wage rate of thirty cents, and at such rates as are embodied in the recommendations of Industry Committee No. 2 for the Apparel Industry:

(a) What if any occupation or occupations in the apparel industry require a learning period, and

(b) Whether it is necessary in order to prevent curtailment of opportunities for employment to provide for the employment of persons in occupations requiring a learning period at wage rates lower than the minimum wage applicable under Section 6 of the Fair Labor Standards Act of 1938, and

(c) If such necessity is found to exist, at what wages lower than the minimum wage applicable under Section 6, such employment of learners shall be permitted, and with what limitations as to time, number, proportion and length of service.

Any person interested in appearing, either in support of or in opposition to the matters prayed for in the petitions for review, may appear on his own behalf or on the behalf of any other person, provided that he shall file with the Administrator, at his office in Washington, prior to noon on September 7, 1939, a Notice of Intention to Appear, which shall contain the following information:

(1) The name and address of the person appearing;

(2) If he is appearing in a representative capacity, the name and address of the person or persons whom he is representing;

(3) Whether he is appearing in support of or in opposition to any petition for review;

(4) The approximate length of time which his presentation will consume;

(5) Scope of appearance, i. e., for which branch of the apparel industry appearance will be made.

The original notice of hearing published July 1, 1939 (4 F.R. 2743 DI), is hereby incorporated by reference in this notice, subject only to the changes stated herein.

Signed at Washington, D. C., this 27th day of July 1939.

PAUL SIFTON,
Acting Administrator.

[F. R. Doc. 39-2796; Filed, July 28, 1939;
12 m.]

FEDERAL POWER COMMISSION.

[Docket No. IT-5580]

IN THE MATTER OF NEW ENGLAND POWER
COMPANY

ORDER SETTING HEARING

JULY 26, 1939.

Commissioners Clyde L. Seavey, Chairman; Claude L. Draper, Basil Manly, Leland Olds, John W. Scott.

Upon application filed July 20, 1939, and subsequently amended, by the New England Power Company (hereinafter referred to as the New England Company), a corporation having its principal office at 441 Stuart Street, Boston, Massachusetts, for an order pursuant to Section 203 of the Federal Power Act authorizing and approving the merger or consolidation of its facilities subject to the jurisdiction of this Commission with the electric facilities of the Bellows Falls Hydro-Electric Corporation (hereinafter referred to as the Bellows Falls Company), a corporation having its principal office at Bellows Falls, Vermont, and with certain of the electric facilities of the Connecticut River Power Company (hereinafter referred to as the Connecticut Company), a corporation having its principal office at Littleton, New Hampshire;

The Commission having considered the said application, as amended, the exhibits thereto, and the petition, and exhibits thereto, filed June 10, 1939 (Docket No. IT-5552) and subsequently amended, by the New England Company, the Bellows Falls Company, and the Connecticut Company for a declaratory determination disclaiming jurisdiction, among other things, with reference to the same proposed merger or consolidation, and it appearing therefrom that:

(a) The said merger or consolidation is to be accomplished by the purchase of the property, assets, and franchises of the Bellows Falls Company, consisting principally of a hydroelectric generating plant on the Connecticut River at or near Bellows Falls and transmission lines used in connection therewith (except cash and except accounts receivable by the Bellows Falls Company from the New England Company), pursuant to a purchase and sale agreement dated June 8, 1939, for a purchase price of \$12,381,739.66, as of April 30, 1939; and the purchase by the New England Company of that portion of the so-called Bellows Falls-Pratts Junction transmission line, located in New Hampshire, from the Connecticut Company, which line connects the lines of the Bellows Falls Company and the lines of the New England Company, pursuant to the aforesaid agreement, for a purchase price of \$672,747.30, as of April 30, 1939;

(b) The Bellows Falls Company was originally chartered for the improvement of navigation on the Connecticut River by the construction and operation of navigation improvements at and near said site and for many years appears to have maintained and operated navigation improvements at or near said site and to have collected tolls for the use of such improvements;

(c) The Connecticut River was used for many years for the transportation of persons and property in interstate and foreign commerce from a point some distance above the site of the aforesaid

hydroelectric generating plant to its mouth, is a navigable water of the United States, and is a stream over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several states; and the aforesaid hydroelectric generating plant may affect the interests of interstate and foreign commerce and may alter or modify the course, condition, or capacity of navigable waters of the United States;

(d) The dam of the said plant may have been constructed or reconstructed in violation of Section 9 of the Rivers and Harbors Act of 1899; the said plant may create an obstruction to the navigable capacity of water of the United States in violation of Section 10 of said Act; the operation and maintenance of said plant may constitute a violation of Section 23 (b) of the Federal Power Act; and an order requiring the licensing of said plant under the Federal Power Act or otherwise pertaining to the construction, operation, maintenance, sale or acquisition thereof, may be appropriate or expedient in the public interest to conserve and utilize the navigation and water power resources of the region;

(e) This Commission has heretofore found that facts hereinbefore recited indicate that this Commission may have jurisdiction with respect to the construction, maintenance, operation, acquisition, transfer or licensing of the aforesaid hydroelectric generating plant;

(f) A public hearing as hereinafter provided for will provide a convenient means for enabling this Commission to consider additional data and information necessary to enable it to determine the scope of its jurisdiction in the premises and, if it finds that it has jurisdiction, to pass upon the said application, and will afford the opportunity for hearing required by the Federal Power Act;

The Commission orders that:

A public hearing on the said application be held at 10:00 A. M., September 13, 1939, in the Commission's Hearing Room, 1757 K Street NW., Washington, D. C., for the purpose of enabling the Commission to determine the scope of its jurisdiction in the premises, and to determine whether the proposed merger or consolidation, including the transfer of the aforesaid unlicensed hydroelectric generating plant, will be consistent with the public interest and what terms and conditions to the authorization and approval thereof, if any, are necessary or appropriate to secure the maintenance of adequate service and the coordination in the public interest of facilities subject to the jurisdiction of the Commission; including, but without limitation, a showing with respect to the following:

(i) As related to the facilities to be acquired, the original cost thereof, as defined in electric plant Instruction 2D of the Commission's Uniform System of

Accounts, or if not known, an estimate of such original cost;

(ii) Whether the proposed merger or consolidation will hamper, obstruct, or otherwise affect, regulation of the operation or maintenance of the facilities involved or regulation of those operating or maintaining such facilities, pursuant to state or federal statutes;

(iii) What effects, if any, the proposed merger or consolidation will have on the interests of investors in securities heretofore issued or hereafter to be issued by any of the above mentioned companies, and upon the interests of consumers of electric energy served directly or indirectly by any of said companies;

(iv) Whether the proposed merger or consolidation of facilities will relate to the integration and coordination of electric facilities subject to the jurisdiction of this Commission and to the assurance of an abundant supply of electric energy with the greatest possible economy and with regard to the proper utilization of natural resources; and what relation, if any, the proposed merger or consolidation of facilities has to any other proposed or contemplated disposition, acquisition, merger or consolidation of facilities by any of the companies herein involved;

(v) Whether the Connecticut River from its mouth to a point some distance above the site of the said hydroelectric plant, or any part thereof, should be held to be navigable waters of the United States or otherwise a stream over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several states;

(vi) Whether the said hydroelectric generating plant should be held by reason of its effects and the effects of its operation on the course, condition, and navigable capacity of waters of the United States, or any of them, to affect the interests of interstate or foreign commerce, and to obstruct, alter or modify the course, condition, or capacity of navigable waters of the United States, or to do either;

(vii) Whether the said hydroelectric generating plant should be held to effect the interests of interstate or foreign commerce, by reason of its effects and of the effects of its operation on highways and railroads, which are instrumentalities of interstate or foreign commerce, and bridges or other structures carrying the same, along, across, over, or near said river, and on interstate or foreign commerce in electric energy, or upon any of them;

(viii) Whether the construction, operation and maintenance of the said hydroelectric generating plant is required by the laws of the United States to be licensed by the Federal Power Commission;

(ix) Whether the said hydroelectric generating plant should be required to be operated and maintained only under

and in accordance with the terms of a license duly issued by the Federal Power Commission;

(x) Whether the effect of the merger or consolidation of facilities of the New England Company subject to the jurisdiction of this Commission, with such a hydroelectric generating plant, without first securing or taking appropriate steps towards securing a license therefor from the Federal Power Commission, will be consistent with the public interest;

(xi) Whether the payment of the price proposed to be paid for such hydroelectric generating plant as stated above, and the issuance of obligations secured in any part by the mortgage or pledge of such plant, as proposed, to enable the New England Company to pay such purchase price, is consistent with the public interest.

By the Commission.

[SEAL]

LEON M. FUQUAY,
Secretary.

[F. R. Doc. 39-2786; Filed, July 28, 1939;
9:28 a. m.]

[Docket Nos. ID-635, 794, 317, 723, 229, 392,
789, 798, 104, 801, 890, 893]

IN THE MATTER OF CHARLES H. TENNEY,
ET AL.

ORDER POSTPONING HEARING

JULY 27, 1939.

Commissioner: Clyde L. Seavey, Chairman; Claude L. Draper, Basil Manly, Leonard Olds, John W. Scott.

It appearing to the Commission that:

(a) On June 20, 1939, the Commission adopted an order fixing September 6, 1939, as the date for a hearing upon the applications of the following named applicants:

Charles H. Tenney.....	Docket No. ID-635.
Isaac S. Hall.....	Docket No. ID-794.
Frank S. Clifford.....	Docket No. ID-317.
Fremont L. Lovett.....	Docket No. ID-728.
Clarence N. Alexander.....	Docket No. ID-229.
Hazel H. Berry.....	Docket No. ID-392.
Ralph E. Trower.....	Docket No. ID-789.
D. Willard Leavitt.....	Docket No. ID-798.
Bernon E. Helme.....	Docket No. ID-104.
Kenneth H. Goss.....	Docket No. ID-801.
Albert B. Tenney.....	Docket No. ID-890.

(b) On July 6, 1939, the Commission adopted an order fixing September 6, 1939, as the date for a hearing upon the application of Charles Milliken Tenney Docket No. ID-893;

(c) Counsel for the above designated applicants have requested the Commission by letter dated July 25, 1939, that the hearings now set for September 6, 1939, in the above entitled matters be postponed until a later date;

The Commission orders that:

Said hearings be and the same are hereby postponed to begin at 10:00 a. m. on the 25th day of September, 1939, in the hearing room of the Commission,

14 F.R. 2470 DL.

Hurley-Wright Building, 1800 Pennsylvania Avenue, NW., Washington, D. C.
By the Commission.

[SEAL]

LEON M. FUQUAY,
Secretary.

[F. R. Doc. 39-2787; Filed, July 28, 1939;
9:28 a. m.]

SECURITIES AND EXCHANGE COMMISSION.

United States of America—Before the Securities and Exchange Commission

At a regular session of the Securities and Exchange Commission, held at its office in Washington, D. C., on the 26th day of July, A. D. 1939.

[File Nos. 34-8, 52-3, 52-5, 52-9, 52-10, 59-1]

IN THE MATTER OF UTILITIES POWER & LIGHT CORPORATION AND CHARLES TRUE ADAMS

ORDER RELATIVE TO APPLICATIONS AND DECLARATIONS

Applications having been filed, pursuant to Section 11 (f) of the Public Utility Holding Company Act of 1935, for approval of the following Plans of Reorganization of Utilities Power & Light Corporation, a registered holding company, hereinafter called the "Debtor":

(a) Plan dated February 1, 1939, filed by Atlas Corporation and amended June 30, 1939 and July 10, 1939;

(b) Plan dated October 23, 1937, filed by Atlas Corporation and by Paul V. Shields, Joseph S. Maxwell and Charlton B. Hibbard, constituting a Protective Committee for Preferred Stockholders of the Debtor;

(c) Plan dated August 23, 1938, filed by the Trustees of Public Utilities Securities Corporation and the Trustee of Webster Securities Corporation;

(d) Plan dated February 21, 1938, filed by Associated Investing Corporation and Associated Utilities Corporation and amended August 27, 1938.

Applications having been filed, pursuant to Section 11 (g) of said Act, for reports upon said plans and declarations pursuant to Rule U-12E-5 having been filed with respect to the solicitation of assents thereto;

A proceeding having been instituted by the Commission, pursuant to Section 11 (b) (1) of said Act, against the Debtor and Charles True Adams, Trustee;

All of said matters having been consolidated for the purpose of hearing by order of the Commission dated August 29, 1938;

A public hearing on said matters having been held pursuant to appropriate notice, said hearing having been concluded with respect to said applications pursuant to Section 11 (f), briefs having been filed and argument had;

The Commission having considered the record, briefs and arguments and hav-

ing made and filed its findings and opinion herein;

It is ordered, That the application pursuant to said Section 11 (f) for approval of the plan dated February 1, 1939, filed by Atlas Corporation and amended June 30, 1939 and July 10, 1939 be and it hereby is granted, and said plan as so amended be and it hereby is approved subject, however, to the following terms and conditions:

(1) That the amendment of July 10, 1939 shall operate to delete all provisions with regard to subscription rights formerly contained in said plan, such provisions being hereby expressly disapproved;

(2) That pursuant to Rule U-11F-1 (e) the Commission reserves jurisdiction to consider any amendments to said application and any definitive documents in connection therewith filed subsequently to the approval herein granted, including (but without limiting the generality of the foregoing) the trust indenture and the certificate of incorporation of the New Company contemplated by said plan;

(3) That prior to the acquisition by the New Company of the stock of The Laclede Gas Light Company, Laclede Power & Light Company and Missouri Natural Gas Company, there shall be filed with the Commission a certified copy of an order of the Public Service Commission of Missouri authorizing or approving such acquisitions, which shall thereupon become part of the record herein;

(4) That the Commission reserves jurisdiction for the purpose of passing on the value at which the assets transferred to the New Company will be entered on its books; and

(5) That the consummation of said plan be effected in substantial compliance with the terms and conditions and for the purposes represented by said application, as amended.

It is further ordered, That the applications and declaration with respect to the plan dated October 23, 1937, filed by Atlas Corporation and by Paul V. Shields, Joseph S. Maxwell and Charlton B. Hibbard, constituting a Protective Committee for Preferred Stockholders of the Debtor, be and they hereby are dismissed;

It is further ordered, That the application pursuant to Section 11 (f) of said Act for approval of the plan dated August 23, 1938, filed by the Trustees of Public Utilities Securities Corporation and the trustee of Webster Securities Corporation be and it hereby is denied, and that the application pursuant to Section 11 (g) of said Act and the declaration pursuant to Rule U-12E-5 relating to said plan be and they hereby are dismissed;

It is further ordered, That the application and declaration with respect to the plan dated February 21, 1938, filed by Associated Investing Corporation and Associated Utilities Corporation and

amended August 27, 1938 be and they hereby are dismissed;

It is further ordered, That this Commission reserves jurisdiction with respect to any and all applications pursuant to Section 11 (g) of said Act and declarations pursuant to Rule U-12E-5, whether now or hereafter filed, relating to said plan dated February 1, 1939, filed by Atlas Corporation and amended as aforesaid;

It is further ordered, That this Commission reserves jurisdiction with respect to the before-mentioned proceeding instituted by it under Section 11 (b) (1) of said Act.

By the Commission.

[SEAL]

FRANCIS P. BRASSOR,
Secretary.

[F. R. Doc. 39-2793; Filed, July 28, 1939;
10:48 a. m.]

*United States of America—Before the
Securities and Exchange Commission*

At a regular session of the Securities and Exchange Commission held at its office in the City of Washington, D. C., on the 27 day of July, A. D. 1939.

[File No. 43-236]

**IN THE MATTER OF CENTRAL POWER AND
LIGHT COMPANY**

NOTICE OF AND ORDER FOR HEARING

A declaration pursuant to section 7 of the Public Utility Holding Company Act of 1935, having been duly filed with this Commission by the above-named party;

It is ordered, That a hearing on such matter be held on August 14, 1939, at 10:00 o'clock in the forenoon of that day, at the Securities and Exchange Building, 1778 Pennsylvania Avenue NW., Washington, D. C. On such day the hearing-room clerk in room 1102 will advise as to the room where such hearing will be held. At such hearing, if in respect of any declaration, cause shall be shown why such declaration shall become effective.

It is further ordered, That Willis E. Monty or any other officer or officers of the Commission designated by it for that purpose shall preside at the hearings in such matter. The officer so designated to preside at any such hearing is hereby authorized to exercise all powers granted to the Commission under section 18 (c) of said Act and to a trial examiner under the Commission's Rules of Practice to continue or postpone said hearing from time to time.

Notice of such hearing is hereby given to such declarant or applicant and to any other person whose participation in such proceeding may be in the public interest or for the protection of investors or consumers. It is requested that any person desiring to be heard or to be admitted as a party to such proceeding shall file a notice to that effect with the Commission on or before August 9, 1939.

The matter concerned herewith is in regard to the issue and sale of \$25,000,-

000 First Mortgage Bonds due August 1, 1969 and \$7,000,000 Serial Debentures or Notes by Central Power and Light Company. The price to the public, underwriters' discount or commission, proceeds to the company and names of underwriters are to be supplied by amendment. The proceeds are to be applied, together with other funds of the company to the extent required, to the redemption and retirement at 104 of \$32,044,200 principal amount of First Mortgage 5% Gold Bonds, 1956 Series, due August 1, 1956, of the company requiring, exclusive of accrued interest, \$33,327,008.

By the Commission.

[SEAL]

FRANCIS P. BRASSOR,
Secretary.

[F. R. Doc. 39-2794; Filed, July 28, 1939;
10:47 a. m.]

*United States of America—Before the
Securities and Exchange Commission*

At a regular session of the Securities and Exchange Commission held at its office in the City of Washington, D. C., on the 28th day of July, A. D. 1939.

[File Nos. 43-237, 46-162]

IN THE MATTER OF COPPER DISTRICT POWER COMPANY, THE MIDDLE WEST CORPORATION

NOTICE OF AND ORDER FOR HEARING

Declaration and application pursuant to sections 7 and 10 respectively of the Public Utility Holding Company Act of 1935, having been duly filed with this Commission by the above-named parties;

It is ordered, That a hearing on such matter be held on August 10, 1939, at 10:00 o'clock in the forenoon of that day, at the Securities and Exchange Building, 1778 Pennsylvania Avenue NW., Washington, D. C. On such day the hearing-room clerk in room 1102 will advise as to the room where such hearing will be held. At such hearing, if in respect of any declaration, cause shall be shown why such declaration shall become effective.

It is further ordered, That Robert P. Reeder or any other officer or officers of the Commission designated by it for that purpose shall preside at the hearings in such matter. The officer so designated to preside at any such hearing is hereby authorized to exercise all powers granted to the Commission under section 18 (c) of said Act and to a trial examiner under the Commission's Rules of Practice to continue or postpone said hearing from time to time.

Notice of such hearing is hereby given to such declarant or applicant and to any other person whose participation in such proceeding may be in the public interest or for the protection of investors or consumers. It is requested that any person desiring to be heard or to be admitted as a party to such proceeding

shall file a notice to that effect with the Commission on or before August 5, 1939.

The matter concerned herewith is in regard to—

(1) A declaration filed by Copper District Power Company, a subsidiary company of The Middle West Corporation, a registered holding company, pursuant to Section 7 of said Act regarding the issue and sale by it of unsecured 4½% notes

in the principal amount of \$78,750 to be dated August 11, 1939 and to mature August 11, 1940. The proposed notes are to be issued in exchange for and to discharge an equal principal amount of unsecured 4½% notes of the company heretofore issued and now outstanding which mature August 11, 1939.

(2) An application by The Middle West Corporation pursuant to Section 10

of said Act for approval by the Commission of the acquisition by it of \$39,375 principal amount of the proposed notes described above.

By the Commission.

[SEAL]

FRANCIS P. BRASSOR,
Secretary.

[F. R. Doc. 39-2795; Filed, July 28, 1939;
10:47 a. m.]

